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CIS/RUSSIA ARMED FORCES

Current Problems With Contract Service

93UM0648B Moscow KRASNAYA ZVEZDA
in Russian 2 Jul 93 p 2

[Article by Maj Vladimir Matryash: "How the 'Pros' Are Faring"]

[Text] The challenging tone of the sturdy young man of around eighteen left no doubt that he would do what he says: "I won't go into the army. Let those who like it serve, but I don't like to waste my time. I'm in business." With the same bravado the youth on TV listed the his possible further actions: "I can play sick for the medical commission, simply not show up at the draft center, or even better, pay someone whatever it costs."

I saw this TV show soon after the present draft had started. Was it counterpropaganda against the draft campaign, or a fortuitous interview? You be the judge. But if this one "TV hero" thought and acted like this . . .

Numbers are a stubborn thing. Of the total number of draftees on the rolls on Jan. 1 of this year, only 16 percent are being drafted. Developing the Armed Forces of Russia under such conditions is incredibly difficult.

But genuine resisters and many legislators fighting for ever new deferments have a common argument: the problem of manning the army and navy should be solved with volunteers. After all, that is just what the Ministry of Defense is doing now. More than a hundred thousand persons have now been accepted into military service by contract. However the rate of implementation of this state task has proved much slower than expected. The main reasons for this go far beyond a purely army framework. The legal working of this new method of recruiting is far from perfect. There is a shortage of material resources for its realization, and still no good advertising and propaganda support for contract service.

However difficult it may be to begin, the way has been paved. And the number of those desiring to sign a contract increases with each month. Fifty-five percent of graduates of general educational academic institutions and 38 percent of compulsory service members see themselves as "pros." Probably some of them will be disappointed. In military affairs the path to true professionalism is unusually difficult. And it makes it all the more comforting that there are people who choose it. While spending some time recently in certain units of the airborne troops, I also met some who had just barely determined their landmarks in life, and some who already have a thorough understanding of what is what in life and service.

Guards Sgt Valeriy Gubanov was discharged to the reserves back in 1978. He had served as an airborne soldier in the Transbaykal Military District. He was a parachute packer. Actually, compulsory service largely predetermined his further service: he taught basic parachuting to boys at a DOSAAF club, and later worked in research work.

"I felt that I was doing a useful job. I and my friends identified hundreds of soldiers and commanders who had died in battles with the fascists on Novogorod ground," recounts Valeriy. "But of course you can't feed your family on ten or fifteen thousand a month. I have three kids, and my wife stays home with the youngest. And then I heard about the contract recruitment. The pay is good, its a job I know, and my health is also good, knock on wood."

Gubanov does not envy his contemporaries who have rushed to "make money." And as for professionalism, it keeps him busy: he's a driver, mechanic-driver, sky-diving instructor, candidate master of sport in classical parachuting. He even has his pilot's license. He is competent to handle all types of equipment and weapons.

However that is not what Guards Major Aleksandr Kuchayev talked about first when the topic turned to what exactly has changed with the arrival of the contract troops.

"The situation is different," the officer says. "How much of the commanders' time goes to constant monitoring and checking! From correct bedmaking to the status of equipment and weapons. You see, we have gotten used to the idea that you have to watch subordinates like a hawk. Now things are quite different. It makes no sense for me to monitor every step of that Gubanov. He is a serious man, a thorough one. And he values his reputation and his job. So that, while he remains a subordinate, he is probably more of a professional colleague in our common service job."

The desire of the officer "to have more like him" is understandable. There are indeed quite a few: those who love and know military affairs, who are devoted to the military fraternity, serious and reliable lads. However new problems also arise with their arrival. Many of the "pros" did not have their own apartment in the civilian world. And getting one during military service . . . The example of thousands and thousands of officers without apartments is before our eyes. Incidentally, if Gubanov had not had his own apartment (his family lives a few dozen kilometers from the unit), he would not have decided to sign a contract either. So he is satisfied with everything, and even intends to extend it when his first term is over. If, of course, not only he, the "pro," but also his family can sense the state's concern.

Incidentally, speaking of the role of the family in the service of the volunteer, I think it is apropos to point out that in the U.S. for example, professionalism, the return from the volunteers, is directly associated with the strengthening of the "rear." In particular, there the military department assumes responsibility for education of the children of service members, and for finding jobs for the wives, providing no-interest loans, legal consultation, organizing cultural and sports recreation and much, much more. The Defense Department spends up 70 million dollars a year just on golf lessons. Some

might call this excessive. Of course, when you're poor as a church mouse, you've no time for golf.

I would like to believe that with time a precise system of incentives, direct and indirect benefits, will also be introduced for volunteers of the Russian Army. But for now the majority of our fellow citizens believe something like this: if we pay the "pros" a lot of money, there will be no end of those wanting it. To some extent this is true, of course. But it is not quite correct to reduce everything to money.

We talked with Guards Sgt Aleksandr Larin on the eve of his departure as part of the 1st Russian Battalion of U.N. Peacekeeping Forces in Yugoslavia. He has a year and a half of compulsory service under his belt, and now he has signed a contract. Aleksandr is a Muscovite. Before the service he worked at the Tushinsk Machine-Building Plant. Speaking of his countrymen who avoid service in every way and accuse the army of every mortal sin, he put it like this: "To judge you have to understand, and to understand, you have to go through it."

It is remarkable that while he had every medical justification to not be a draftee at all, Aleksandr managed to be sent to the Airborne Troops. He strove to test and harden himself. But not only the romance of military service prompted him to sign a contract. He also has a more mundane motive. "At home I have a little sister, a third grader, and mama. I have to bring in some money. And I want to marry someday myself. But I don't know how to 'hang around' and make money in the civilian world. And I don't want to. I'm used to working to earn a living. But tell me, where could I honestly earn eight hundred dollars a month? And besides that, the people of Yugoslavia are going through hard times, and I am not going to conquer a foreign land, I'm bringing peace."

There were many who wanted to travel abroad as part of the battalion of peacekeeping forces. However this selection is serious: first you have to demonstrate your professionalism here, at home. And as the deputy commander of this subunit, Guards Lt-Col Yevgeniy Kobozev noted, there are no casual personnel.

However, let's return to the "pros" who are serving in the Motherland. Are they bringing only positive changes to the life and training of the subunits? In the regiment commanded by Guards Lt-Col Aleksandr Kobelev, there are almost two hundred contract troops. However, Aleksandr Ivanovich does not consider such an imposing number an achievement. In the Airborne Troops, quality—mastery, experience, ability—is valued more.

The commander of an airborne company, Guards Capt Vladimir Shcherbatov, who went through Afghanistan, can figure out very quickly who is worth something. He recounts:

"They sent us a contract troop, Jr Sgt Sergey Bobkov. We made him a machinegunner. As a gunner he was so-so, but that is something that can be fixed. But there was worse: he began to come in late, and at times didn't show up at all for work, and he flatly refused to jump. That's

what they call a "pro"? Hey, I have compulsory service troops like Sgts Aleksey Shemyakin and Sergey Novikov, and Pvt Yevgeniy Bezgemer, who could put him to shame in every category."

Unfortunately that's not the only such case. In this regiment alone, in just a few months the command had to get rid of thirty such miserable professionals.

"They should let the commanders with whom the volunteers intend to serve select the candidates themselves, and such mistakes could be avoided," says Capt Shcherbatov.

But then there is the commander of a SAM platoon, Guards Warrant Officer Leonid Itashinskiy, who believes he has been lucky in his contract troops. Two of them: senior mechanic-driver Guards Jr Sgt Rustam Nigmatullin and gunner-operator Guards Jr Sgt Valeriy Mezhiyev. In general, he can't stop crowing about Rustam:

"After he arrived, I forgot what defective equipment was. But that's not all. Among the compulsory service soldiers and sergeants too, their attitude toward their work became somehow different. I feel that the seriousness, thoroughness and responsibility of Nigmatullin is transferred to them as well."

Even these few examples convince us that the new method of recruiting has a lot of its own specific features and subtleties. It is still necessary to resolve a lot of problems before the fighting team will have precisely those "pros", who will have to compensate for the loss of the former numerical strength of the army ranks with their proficiency and reliability. But the desire to quickly select all who want to come, to resolve the disastrous problem of the personnel shortage is a forced measure. Casual personnel will not strengthen the fighting team.

The selection criteria we choose should be high from the start. Incidentally, the experience of certain units of the Pacific Fleet, where there is competition among the volunteers even now, confirms the growing popularity of the new manly profession. Probably with time even those who are trying to disavow the army by hook or by crook will understand that the contract is a worthwhile thing.

Burlakov on Troop Withdrawals From Germany *934E1015A Moscow IZVESTIYA in Russian 8 Jul 93* *p 5*

[Article by IZVESTIYA correspondents Igor Andreyev and Nikolay Burbyga: "The Withdrawal of Troops Proceeds Normally. However, There Have Been Losses"]

[Text] On 17 June 1945, the newspaper KRASNAYA ARMIYA published an unpretentious message in verse, done in the spirit of the times, from the pioneer Vanya to his friend Petya about the reasons why his father was residing in Berlin:

"My father was given an order
—to take Berlin.
And my father did.

Comrade Stalin
sent him a message of gratitude....
This is why you should note
That my father is a victor.
He is a victor, you see, Petka,
And he cannot go home." Can he go home now?

Course for Russia

In the five months of 1993, about 75 percent of the personnel and materiel and about 70 percent of the material assets of the Western Group of Forces were withdrawn from Germany.

We visited the 34th Artillery Division when a considerable part of its self-propelled materiel was en route to the embarkation station. Before our eyes, self-propelled guns and prime movers were placed on flatcars within hours. The military train was on its way only after the representatives of the transportation service and German railway employees verified the necessary documentation and the correct placement of materiel.

Major General Nikolay Frolov, the division commander, said: "The division is being withdrawn to the Moscow Military District. We were luckier than others: Ready facilities already exist at the location where we will be stationed. This is why the housing problem is not as acute as it is, for example, for our neighbors the tank men. By 1 July, we will have withdrawn 50 percent of the servicemen, and all of them will have a roof over their heads."

At present, the rate of troop withdrawal from Germany outpaces the rate of housing construction in Russia by a factor of nine (!). As we were told, the apartment building program is, unfortunately, spinning its wheels. This is due largely to the fact that, following the disintegration of the USSR, we were forced to split the 7.6 [figure not clear] billion Deutsche marks allocated by the Germans among three republics. As the servicemen of the Western Group of Forces believe, Russia was short-changed during the "split" because originally it was planned for a large proportion to withdraw to Ukraine and Belarus. Thus, in 1991 and 1992, 144 percent of the planned number were withdrawn to Belarus, 48 percent to Ukraine, and only 11 percent to Russia.

Colonel General Matvey Burlakov said: "Nonetheless, everything possible is being done for the withdrawn units and large units to fully provide housing for their people. The program calls for building 36 residential settlements with 38,768 apartments (more than was planned earlier—note by Igor Andreyev and Nikolay Burbyga). In conjunction with moving up the deadline for the withdrawal of troops from Germany by four months and allocating an additional 550 million Deutsche marks, the additional construction of residential settlements for a total of 450 million Deutsche marks is now envisaged in Nakhabino, Moscow Oblast (2,000 apartments), Rostov (1,500 apartments), Vsevolzhsk and Strugi-Krasnye, Leningrad Oblast (1,600 apartments)."

The Commander-in-Chief went on to say: "In conjunction with the fact that deadlines for troop withdrawals run far ahead of the rate of housing construction for the withdrawn servicemen, we and the German side have adjusted the schedules considerably. They were revised in the direction of reducing the duration of building the facilities planned earlier, taking into account the new schedule for the withdrawal of units.

"Professionals" from the Western Group of Forces

Last year, only 28 to 30 draftees out of 100 joined the ranks of the Russian Army, and in Moscow—as few as eight to 10 draftees. About 20 percent of the young men dodged military service altogether. As a result, only one-quarter of the troop requirements for recruits were met last fall.

There is no draft to Germany from Russia at all. Had it not been for Uzbekistan, which agreed to send 10,000 of its young men here, and so-called contractors, the Western Group of Forces would have been left without young replenishment. At present, 9,000 contractors serve with the group. In the opinion of Commander in Chief Burlakov, all of them are well trained and disciplined, and "they give him no headaches."

After the law on contract service was adopted, more than 400 people expressed their desire to continue it in the aforementioned artillery division. All of them have served two years. The most experienced and authoritative specialists were selected—mechanic-drivers, signalmen, gunlayers. Outwardly, the servicemen of this category differ little from soldiers in compulsory military service, except by the warrant officer's shoulder boards, which they wear without the stars.

What prompted them to extend their service? It is the desire to remain in the collective to which they have grown accustomed during the years in the service, and an opportunity to become an officer in the long term. However, it seemed to us that an opportunity to improve their financial standing became decisive for most of them. Unlike soldiers in compulsory military service, who are paid 25 Deutsche marks a month, contractors make about 200 Deutsche marks and 40,000-50,000 rubles [R] which are deposited in their accounts in Russia.

All of those who have signed contracts serve with the status of soldiers in compulsory service. However, they live six to eight to a room, and sometimes even two to four. In their spare time, they may allow themselves to relax and drink beer since they have money, even if not a great deal. To be sure, they have no right to leave the compounds of their units alone, but only in groups. As their superiors say, this is so because a situation conducive to crime has now developed around military units.

"Foresters" and Deserters

Former Soviet citizens who sell consumer goods next to military units—from quite inexpensive used cars to condoms with musical and other effects—are called "foresters" in Germany. As a rule, most immigrants

have residence permits; they are allowed to engage in trade. However, some of them do not shrink from criminal undertakings. Attempts to penetrate facilities under guard, the compounds of units and military settlements, and to persuade servicemen to sell weapons and ammunition have become more frequent.

General Burlakov said: "Previously, the Germans considered all Russian speakers to be servicemen from the Western Group of Forces. They stopped suspecting us only after the police carried out a few large raids: There were no servicemen among the apprehended criminals."

Just two years ago, after the Berlin Wall collapsed and Germany became united, several hundred soldiers and officers of the Western Group of Forces turned out missing. Losses at the time came to 239 people—approximately 0.05 percent of the group's personnel. The situation has now stabilized. In the opinion of the commanders, those who wish to live under capitalism are not all that numerous. Some of those who departed at the time have asked to be taken back. Superiors and military lawyers show understanding for this turn of events; they talk to each returnee for a long time, trying to understand the motives for his desertion. If nothing criminal is involved, many succeed in returning to the Motherland without special complications. At the headquarters of a tank army which is deployed a three-hour drive away from Berlin, they happened to be sorting out the case of a woman who, having abandoned her officer husband, secretly went to the west of Germany with her son two years ago.

Here is still another episode. In this case, two warrant officers acted as the main characters. Having decided to buy a used car, they went to Hanover without authorization (a Russian serviceman may visit West Germany only by permission of his and the German command—note by Igor Andreyev and Nikolay Burbyga). They succeeded in buying the car cheaply; this is why, as is the custom, the friends had a drink to celebrate the purchase. Having gotten stewed to the gills, they decided to drive on small country roads rather than the motorway. They were out of luck anyway—they ran into the police. After they returned home, they said that they had not even thought of requesting asylum in any country. However, they had requested it out of fear of being shipped to Russia immediately.

They got over their hangovers in a camp for immigrants. They asked to go back. Having returned, they told everyone how unfairly the Germans had treated them. In the process, the most vivid episode was the memory of a Negro who lived together with them in the same room. He got to use the bed, and the warrant officers had to spend nights on a mattress, on the floor.

General Frolov, the commander of the artillery division, believes that there are several reasons for the decline in the number of those wishing to cross over to the West. He said that a powerful group was previously deployed here which was prepared to march anywhere on orders from Moscow. Of course, Germans were very concerned

about this. For this reason, a lot was done to demoralize the troops. All deserters were welcomed. On occasion, the people were incited to flee, and mountains of gold were promised to them.... The situation has now changed. The fugitives are no longer of interest to anyone. The press has calmed down, and the overall tone of publications has become more benevolent.

The Mukran Drama

The Mukran-Klaipeda ferry complex, designed for busy freight traffic between the GDR and the USSR, was commissioned several years ago, with fanfare. The complex is in a position to handle and carry more than 5 million tonnes of freight annually. At present, Mukran is going through a difficult time. The management has been forced to reduce personnel and mail out advertising brochures in order to attract partners from both the CIS and Western countries, where, in the opinion of Mr. Heervart [transliteration] Schindler, the manager of the ferry complex, few people are aware of the ferry connection. Current traffic comes to as little as 20 percent of the 1989 level. Military freight going east accounts for 75 percent of it.

Our military resorted to the ferry connection after Poland excessively increased rates for the passage of trains through its territory. As practice has shown, the endeavor has turned out to be mutually advantageous for the German and the Russian side. We saw how the loading and stowage of materiel proceeded simultaneously on five tracks with Germanic precision. Subsequently, cars were pushed onto an arriving vessel by two locomotives. Embarkation on the ferry and disembarkation take about four hours on the whole.

Colonel Valeriy Kurikhin, deputy chief of the military transportation service, said: "The vessel travels from Mukran to Klaipeda in less than one day. This year, two percent of the materiel left under its own power, and 56 percent left through Rostock and Poland; 37 percent of the total number of troops being withdrawn went through Mukran. However, even this float will no longer sustain the ferry connection come August 1994. Mr. Schindler and his subordinates are some of the now hard-to-find Germans who would like the withdrawal of Russian troops to last longer."

Most of our servicemen who we have happened to talk to do not approve of such tight deadlines for withdrawal. The former politicians of the USSR are not exactly the most popular people there. However, the withdrawal proceeds on schedule. We were interested in listening to the opinion of the German side concerning this. Major General Khartmut Ferch, [transliteration] who is responsible for liaison between the Bundeswehr and Russian troops in Germany, communicated the following in a conversation with us: He does have a small difference with the Russians concerning the destruction of munitions. In his words, the Russian General Staff wants to destroy some of the munitions on site, in the FRG. The group strives to have them removed to Russia. "Of course, this is an internal matter for the Russians.

However, as we see it, it is necessary to remove the munitions in keeping with the agreement, after all, because it is impossible to destroy them on the territory of Germany in view of the condition of the natural environment. As far as the progress of the withdrawal of Russian troops is concerned, I have no complaints about the Russians on this issue. The troops are being withdrawn on schedule...."

Orders by MoD Organizing Insurance System for Servicemen

93UM0664A Moscow KRASNAYA ZVEZDA in Russian
3 Jul 93 pp 3, 4

[Unattributed article: "Insurance for People in Uniform"]

[Text] Mandatory state personal life and health insurance for servicemen is a relatively new phenomenon in the system of social guarantees. Such compensatory payments and one-time assistance were a regular feature of the USSR Armed Forces. But they applied only to servicemen of certain formations—for example those that took part in combat activities in the Republic of Afghanistan. And it was only as of 1 January 1991, following adoption of the corresponding government decree, that not only those on permanent active duty but also reservists undergoing training came to be considered automatically insured. Insurance benefits for the cases of their death due to accident or hostile action, mutilation, wounds or other damage to health were determined.

But much has changed in the little more than 2 years since then. Inflation completely devalued payments that could have served as at least some compensation to families of deceased servicemen and to disabled servicemen. With the establishment of the Russian Army, the social guarantees of servicemen had to be documented in new legislative acts.

A package of military laws was adopted not that long ago, and the law "On the Status of Servicemen" affirmed insurance guarantees to servicemen and the right to remuneration for damage they suffer in the performance of military duty. In execution of this law, a corresponding decree of the Government of the Russian Federation was issued in April, and on 6 May 1993 the minister of defense signed Order No 246.

On 28 May 1993 KRASNAYA ZVEZDA commented on these documents in an article titled "You Are Dependably Insured" written with the assistance of the Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense. But it is evident from the mail that new questions are continually arising, and many of our readers are asking us to publish the adopted documents on mandatory state personal insurance for servicemen in their entirety.

In an effort to satisfy these wishes, the defense minister's order, the Instructions on Organizing Insurance in the Army and Navy and the list of mutilations, wounds, injuries and concussions classified as severe or minor

(Attachment No 1 to the Instructions) are published in this newspaper today. We also note that the attachments, which are not published here, also contain samples of the necessary certificates, applications, reporting forms and document registration logs. They should be available in all military units, services and organizations, where the reader may acquaint himself with them if need be.

Order No 246 of the Russian Federation Minister of Defense, 6 May 1993, "On Mandatory State Personal Insurance and the Procedure for Paying One-Time Assistance to Servicemen, Civilians Called Up for Military Training and Their Families"

In compliance with the Law of the Russian Federation "On the Status of Servicemen"¹ and Decree No 295 of the Council of Ministers and Government of the Russian Federation dated 5 April 1993 "On the Procedure of Mandatory State Personal Insurance of Servicemen, Civilians Called Up for Military Training, and the Enlisted Personnel and Commanders of Internal Affairs Organs,"²

I RESOLVE:

1. That deputy defense ministers of the Russian Federation, commanders-in-chief of armed services of the Russian Federation, commanders of district troops, groups of forces, fleets, armies and flotillas, commanders (superiors) of combat arms, chiefs of main and central directorates of the Russian Federation Ministry of Defense, commanders of combined units and military units, chiefs of services, military educational institutions, enterprises and organizations of the Russian Federation Ministry of Defense and military commissars shall provide for:

—payment, as of 1 January 1993, of one-time assistance to servicemen, civilians called up for military training and their families in cases and in amounts foreseen by clauses 2 and 3, Article 18 of the Law of the Russian Federation "On the Status of Servicemen";

—payment, as of 1 March 1993, of insurance benefits to servicemen, civilians called up for military training and their families in amounts, according to procedures and on the basis of conditions foreseen by Decree No. 295 of the USSR Council of Ministers and Government of the Russian Federation dated 5 April 1993.

That one-time assistance and insurance benefits shall be paid in accordance with the Instructions on Organizing Mandatory State Personal Insurance and on the Procedure for Paying One-Time Assistance to Servicemen of the Armed Forces of the Russian Federation, to Civilians Called Up for Military Training and to Their Families (Attachment No 1 to this order);

—adoption of additional measures directed at improving educational work with subordinates, tightening military discipline and law enforcement in the troops (fleet forces) and preventing cases of death and injury of servicemen and civilians called up for military training;

—prompt drafting, publication and provision of the appropriate documents needed by servicemen, civilians called up for military training and their families to resolve the matter of payment of insurance benefits on the basis of mandatory state personal insurance and of one-time assistance through the Military Insurance Company. Office space, furniture, inventory, office equipment, transportation and communication resources shall be provided to the indicated company and to its affiliates for their use on a contract basis in accordance with legislation currently in effect.

2. That the chief of the Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense shall:

—determine, in coordination with the Military Insurance Company, and submit, for approval in accordance with the established procedure, the procedure for settling accounts pertaining to mandatory state personal insurance of servicemen and civilians called up for military training;

—establish the procedure for monitoring the lawfulness of expenditure of monetary resources allocated from the republic budget of the Russian Federation to the Russian Federation Ministry of Defense for mandatory state personal insurance of servicemen and civilians called up for military training, and for payment of one-time assistance.

3. That the rules contained in orders and directives of the USSR Minister of Defense and the First Deputy USSR Minister of Defense shall be deemed invalid in the Armed Forces of the Russian Federation, and rules contained in orders of the Minister of Defense of the Russian Federation shall be recognized to be null and void in accordance with Attachment No 2 to this order.

4. That the order is to be disseminated to separate battalions, services, military educational institutions, enterprises and organizations of the Russian Federation Ministry of Defense and rayon military commissariats.

[Signed] Russian Federation Minister of Defense Army General P. Grachev

Instructions of the Russian Federation Ministry of Defense "On Organizing Mandatory State Personal Insurance and on the Procedure for Paying One-Time Assistance to Servicemen of the Armed Forces of the Russian Federation, to Citizens Called Up for Military Training and to Their Families" (Attachment No 1 to Order No 246 of the Russian Federation Minister of Defense, 1993)

I. General Provisions

1. These Instructions determine:

—insurance regulations, the procedure for drafting documents and paying insurance benefits (referred to henceforth as insurance support) pertaining to mandatory state personal insurance of officers, shore-based and seagoing warrant officers, extended-service servicemen, women serving active duty in private and

NCO positions, contracting and drafted servicemen on active duty, civilians called up for military training (referred to henceforth as servicemen) and their families in accordance with Decree No 295 of the Council of Ministers and Government of the Russian Federation dated 5 April 1993, "On the Procedure for Mandatory State Personal Insurance of Servicemen, Civilians Called Up for Military Training, and Enlisted Personnel and Commanders of Internal Affairs Organs";

—the procedure for paying one-time assistance to servicemen in the event of suffering mutilation (wounds, injuries, concussions) or illnesses³ making their further service impossible, or in the event of their death due to accident or hostile action (natural causes);

—the procedure for monitoring the work of mandatory state personal insurance and payment of one-time assistance to servicemen (their families) and the procedure for submitting reports.

2. Servicemen shall be insured against accidents at state expense for the entire time of their service, as well as for 1 year following termination of service in the event of their death due to accident or hostile action (natural causes) or establishment of disability arising as a result of health damage that occurred during active duty.

The day a civilian's name is entered on the personnel roster of a military unit, service, military educational institution, enterprise or organization of the Russian Federation Ministry of Defense (henceforth referred to as military units) shall be considered to be the beginning of active duty. The day of expiration of the term of active duty shall be considered to be the end of active duty.

3. The conditions, rules and procedure of insurance support foreseen by these Instructions shall extend:

a) to servicemen of the Armed Forces of the Russian Federation regardless of their place of service, to discharged servicemen of the Armed Forces of the Russian Federation residing within the Russian Federation, and to their families;

b) to servicemen residing within the Russian Federation after discharge from active duty in the armed forces of member nations of the Commonwealth of Independent States with which the Russian Federation has signed treaties (agreements)⁴ regarding insurance, and to their families;

c) to servicemen discharged from the Armed Forces of the Russian Federation and to the families of servicemen of the Armed Forces of the Russian Federation residing within states which are former republics of the USSR but which are not members of the Commonwealth of Independent States, with which the Russian Federation has not signed treaties (agreements) regarding insurance, if the legislation of these states does not foresee mandatory state insurance for this category of persons.⁵

4. Insured events (henceforth referred to as insured accidents) shall include:

- a) death due to accident or hostile action (natural causes) of the insured during active duty;
- b) death due to natural causes of the insured within 1 year after completion of active duty as a result of health damage that occurred during active duty;
- c) certification of the insured's disability during active duty;
- d) certification of the insured's disability within 1 year after discharge from active duty as a result of health damage that occurred during active duty;
- e) severe or minor mutilation, wound, injury or concussion suffered by the insured during active duty (the list of mutilations, wounds, injuries and contusions classified as severe or minor is presented in Attachment No 1 to these Instructions);
- f) recognition of a drafted active duty serviceman (civilian called up for military training) to be unfit for health reasons for further service (military training) as a result of health damage that occurred during active duty (military training).

When the same events occur as a result of the insured's unlawful actions or alcoholic, narcotic or toxic intoxication or mutilation, they are not insured, and insurance support shall not be paid for in their behalf. The unlawfulness of the actions of the insured shall be established on the basis of documents of the court or corresponding bodies investigating the given accident.

5. In the event of death by accident or by hostile action (natural causes) of servicemen (civilians called up for military training) occurring during their performance of the responsibilities of active duty (military training), or of their death by natural causes within 1 year from the day of discharge from active duty (completion of military training) as a result of a mutilation, (wound, injury, concussion) or illness suffered by them in the performance of the responsibilities of active duty (military training), one-time assistance amounting to 120 times the base pay and allowances⁶ shall be paid (in equal fractions) to members of their families—wives (husbands), children under 18 years of age (students up to 23 years of age), or older if they had become disabled prior to reaching 18 years of age, and fathers and mothers.

This assistance shall be paid to members of the families of servicemen who reside within the Russian Federation at the moment of their application for assistance.

If during their performance of the responsibilities of active duty servicemen suffer mutilation (wounding, injury, concussion) or illness precluding their possibility for further military service, they shall be paid one-time assistance amounting to 60 times base pay and allowances.⁶

In this case performance of the responsibilities of active duty shall be defined as:

- a) participation in combat activities;

- b) performance of official responsibilities established in accordance with military regulations;
 - c) performance of alert duty (combat service);
 - d) participation in exercises and ship cruises;
 - e) fulfillment of an order, instruction or task given or posed by a commander (superior);
 - f) presence on the territory of a military unit during official work time established by the daily routine, or if such presence is brought about by official necessity;
 - g) presence on an official business trip or under treatment;
 - h) travel to and from a place of service or treatment;
 - i) participation in military training;
 - j) imprisonment (except in cases of voluntary surrender), and presence in the status of a hostage or interned individual;
 - k) the state of being a missing person—until the serviceman is deemed to be missing in action or proclaimed dead according to procedure established by law;
 - l) protection of the life, health, honor and merit of individuals;
 - m) when providing assistance to law enforcement organs in maintaining lawfulness and order;
 - n) other actions by a serviceman recognized by a court to have been committed in the interests of the society and state.
- A serviceman shall not be recognized as performing the responsibilities of active duty:
- when he is away from the location of the military unit for reason of rest, liberty or leave, except in cases foreseen by clauses "j"—"h" of this article;
 - when absent without leave from the location of the military unit or place of service, except in cases foreseen by clauses "j"—"h" of this article;
 - when voluntarily brought to a state of narcotic or toxic intoxication;
 - when committing a socially dangerous act foreseen by criminal legislation;
 - when committing suicide or attempting suicide, if the indicated actions were not brought on by a diseased state or by having been driven to suicide.

In the event of death due to accident or hostile action (natural causes) of a serviceman or damage suffered to health which precludes his possibility for further active duty occurring when not in the performance of the responsibilities of active duty, one-time assistance shall not be paid to the serviceman or his family.

6. Insurance support based on mandatory state personal insurance of servicemen is paid to the insured or, in the established cases, to his family regardless of the amount awarded to them by other forms of insurance as well as

by social insurance, social support and as remuneration for damages, resulting from insured accidents beginning as of 1 March 1993.

7. When insured accidents foreseen by Article 4 of these Instructions occur, social support (one-time assistance) shall be paid by the Military Insurance Company (103160, Moscow, K-160, Rybny Lane, Building 2) or its affiliates at the place of residence (registration) or work of the insured (his family).

Insurance support (one-time assistance or a fraction of it) awarded to an underaged beneficiary shall be paid to his parents (adoptive parents, guardians, trustees) and in their absence, it shall be transferred to the corresponding division (affiliate) of the Savings Bank of the Russian Federation for deposit in his name; in this case guardianship and trusteeship organs shall be notified of this concurrently.

8. Social support and, in cases established by legislation, one-time assistance shall be paid if a personal written application for their payment is sent to the Military Insurance Company within 3 years from the day the right of their acquisition becomes effective.

9. Insurance support (one-time assistance) shall be paid within 7 days from the day of receipt of all necessary documents foreseen by these Instructions by the Military Insurance Company.

Notification of an award of insurance support (one-time assistance) shall be sent by the Military Insurance Company to each beneficiary; such notification shall indicate the amount to be paid and the number and address of the division (affiliate) of the Savings Bank of the Russian Federation to which the awarded amount is transferred.

In the event that payment of insurance support (one-time assistance) is denied, the Military Insurance Company shall communicate this in writing to the applicant and to the Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense, with mandatory explanation of the grounds for the denial.

10. Military units and military therapeutic institutions of the Russian Federation Ministry of Defense shall be obligated to communicate, to the Military Insurance Company or its affiliates at their request, information associated with insured accidents, and send the necessary documents on the circumstances leading to these accidents.

11. When drafted servicemen serving active duty and civilians called up for military training who are recognized for health reasons to be unfit for further active duty (military training) leave for their selected place of residence, the military unit or military therapeutic institution shall furnish them with a copy of the certificate of illness together with the corresponding conclusion of the military medical board to be submitted to the Military Insurance Company.

12. If during active duty the insured suffered severe or minor mutilation (wound, injury, concussion) that does not preclude his possibility of further active duty, the corresponding military medical board furnishes him a certificate of the established format (Attachment No 2 to these Instructions). This certificate shall be registered according to the established procedure, and a copy of the certificate shall be stored by the military medical board for 3 years from the day of its issue. The severity of health damage shall be determined by military medical boards on the basis of the List of Mutilations, Wounds, Injuries and Concussions Classified as Severe or Minor (Attachment No 1 to these Instructions). In the event that the insured loses the health damage certificate, upon his application to the military medical board a duplicate of this certificate bearing the notation "Duplicate in Place of Lost Certificate" in its upper right corner shall be issued.

13. When a serviceman suffers health damage during his performance of the responsibilities of active duty that precludes his possibility of further performance of active duty, in addition to the documents indicated in articles 11, 12 of these Instructions the corresponding military medical board issues a certificate of the established format (Attachment No 3 to these Instructions).

14. When disability occurs after insured accidents foreseen by articles 11 and 12 of these Instructions or when a discharged serviceman is raised to a higher disability group within 1 year from the day of completion of military service, insurance support shall be paid less the amounts previously paid for this same insured accident.

15. In the event of their departure for residence in states that were formerly republics of the USSR, servicemen discharged from the Armed Forces of the Russian Federation in connection with health damage suffered during their performance of the responsibilities of active duty that precludes their possibility of further active duty shall receive one-time assistance on the condition that they furnish the necessary documents (articles 19, 23 of these Instructions); such assistance shall be paid by depositing it in a special account in rubles or transferring the amounts to the division (affiliate) of the Savings Bank of the Russian Federation indicated by the recipient.

16. Servicemen of the Armed Forces of the Russian Federation serving in the Latvian Republic, the Lithuanian Republic and the Estonian Republic and discharged servicemen remaining to reside in these states, and in the event of the death of these persons due to accident or hostile action (natural causes), their families residing in these countries shall be paid insurance support (one-time assistance) by the Military Insurance Company in the national currency and in the established amounts based on pay and allowances as of 31 December 1992.

II. Procedure for Filling Out Documents for the Payment of Insurance Support and One-Time Assistance

17. When insured accidents indicated in Article 4 of these Instructions occur, the commander of the military unit (rayon military commissar) shall fill out a certificate in two copies for resolution of the issue of paying insurance support and one-time assistance in the cases established by law (attachments No 4, 5, 7, 8, 9, 10 to these Instructions), and forward the first copy of the certificate and other documents to the Military Insurance Company within 3 days. The second copy of the certificate shall be stored in the financial service of the military unit for 3 years.

All information, including on the families of servicemen possessing the right to receive the corresponding amounts, shall be entered onto the certificate on the basis of the personal file, service reports and other documents available in the military unit (rayon military commissariat). Responsibility for the truthfulness of information indicated in certificates shall be borne by the commanders of military units (military commissars).

18. In order to provide for timely payment of insurance support (one-time assistance), military units (rayon military commissariats) at the place of service (residence) of the insured or of their families shall provide assistance to them in requisitioning and filling out documents necessary for resolution of the issue of the right to receive the corresponding amounts.

19. Military units (rayon military commissariats)⁷ as well as the insured themselves or their families shall fill out and submit the following documents to the Military Insurance Company in order to determine the right to receive insurance support:

a) In the event of death of the insured due to accident or hostile action (natural causes) while serving active duty:

- a certificate (Attachment No 4 to these Instructions);
- an application of the established format (Attachment No 6 to these Instructions) from each family member possessing the right to receive insurance support, with the exception of underaged children;
- a copy of the death certificate;
- a copy of documents confirming kinship with the insured;⁸

b) In the event of the death of the insured within 1 year after termination of active duty as a result of health damage that occurred during active duty:

- a certificate (Attachment No 5 to these Instructions);
- an application (Attachment No 6 to these Instructions) from each family member possessing the right to receive insurance support, with the exception of underaged children;
- a copy of the death certificate;

—copies of documents confirming kinship with the insured.

When it is impossible to submit all of the documents indicated in clauses "a" or "b" of this article to the Military Insurance Company (for example in view of the fact that members of the families of killed (deceased) servicemen live away from the location of the military unit, and so on), the filled-out certificates are forwarded to the Military Insurance Company without requisitioning the lacking documents. In this case the Military Insurance Company independently informs members of the family of the killed (deceased) serviceman of their right to receive insurance support (one-time assistance), and requests applications and copies of all the necessary documents from them.

In the event of the death of some member of the family of the insured indicated in the certificate, copies of the death certificates of these individuals shall be submitted additionally to the Military Insurance Company in order to permit establishment of the fraction to be paid to each individual;

c) In the event of establishment of the insured's disability during the time of active duty:

- a certificate (Attachment No 7 to these Instructions);
- an application (Attachment No 6a to these Instructions);
- copies of the certificate from the medical commission for determination of disability, indicating the disability group, the causes and the time of its establishment;

d) In the event of establishment of the insured's disability within 1 year following termination of active duty as a result of health damage that occurred during active duty:

- a certificate (Attachment No 7 to these Instructions);
- an application (Attachment No 6a to these Instructions);
- a copy of a certificate from the medical commission for determination of disability, indicating the disability group, the causes and the time of its establishment;

e) In the event of severe or minor wounding (concussion, injury, mutilation) of the insured during active duty:

- a certificate (Attachment No 8 to these Instructions);
- an application (Attachment No 6a to these Instructions);
- a certificate from the medical commission for determination of disability on the severity of the wound, in the established format (Attachment No 2 to these Instructions);

f) In the event of recognition of a drafted active duty serviceman (civilian called out for military training) as being unfit for health reasons for further active duty (military training):

- a certificate (Attachment No 9 to these Instructions);
- an application (Attachment No 6a to these Instructions);
- a copy of the certificate of illness together with the conclusion of the medical commission for determination of disability regarding unfitness for further service (military training) for health reasons.

20. Copies of all submitted documents shall be notarized according to procedure established by legislation currently in effect.

21. Pay and allowances on the basis of which insurance support (one-time assistance) are calculated are indicated on certificates submitted to the Military Insurance Company without regard for increases awarded for duty in remote locales and in places with difficult climatic conditions, and other increases established by legislation.

22. The right to payment of one-time assistance in the event of the death due to accident or hostile action (natural causes) of servicemen during their performance of the responsibilities of military service or their natural death within 1 year from the day of termination of active duty as the result of health damage suffered during performance of the responsibilities of military service shall be determined on the basis of documents submitted to the Military Insurance Company in accordance with clauses "a" and "b" of Article 19 of these Instructions.

23. When in the performance of his responsibilities of military service a serviceman suffers health damage precluding his possibility of further active duty, following discharge from active duty he shall apply to the rayon military commissariat at his place of residence, who shall fill out a certificate for adoption of a decision on payment of one-time assistance (Attachment No 10 to these Instructions), append the serviceman's application and the certificate from the medical board (Attachment No 3 to these Instructions), and send the listed documents to the Military Insurance Company.

III. Supervision of the Work of Mandatory State Personal Insurance and Payment of One-Time Assistance to Servicemen and Their Families. Submission of Reports

24. The Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense shall provide overall leadership to the work of mandatory state personal insurance of servicemen and payment of one-time assistance in the Russian Federation Ministry of Defense.

25. Supervision of the work of military units (rayon military commissariats) associated with filling out documents, and of the promptness of their submission for resolution of the issue of payment of insurance support (one-time assistance), shall be the responsibility of the financial service of the armed services, groups of forces and fleets (henceforth referred to as the financial service

of the military district) and oblast military commissariats (military commissariats of national-state and administrative-territorial formations, and kray and Moscow and St. Petersburg city military commissariats).⁹

26. The Central Military Medical Board of the Russian Federation Ministry of Defense and the medical services of the armed services, groups of forces and fleets shall maintain supervision over the correctness with which certificates of health damage (attachments No 2, 3 of these Instructions) are filled out by military medical boards and the lawfulness of their issue.

27. A special log of materials filled out for resolution of the issue of payment of insurance support (one-time assistance) shall be maintained in the report format (Attachment No 11 to these Instructions) in military units and rayon military commissariats.

28. Military unit financial organs and oblast military commissariats shall submit quarterly reports on the 15th of the month to the financial service of the military district on the quantity of materials filled out for payment for insurance support and one-time assistance, in the established format (Attachment No 11 to these Instructions).

The financial service shall submit a summary report of this format for the military district by the 20th of the month following the reporting quarter to the Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense.

29. The Military Insurance Company shall maintain a registration log of documents submitted and insurance support paid on the basis of mandatory state personal insurance of servicemen, and a registration log of documents submitted and one-time assistance paid (attachments No 12, 13 of these Instructions).

30. The Military Insurance Company shall communicate information to the Russian Federation Ministry of Defense on payments of insurance support and one-time assistance quarterly, by the 10th of the month following the reporting quarter, and submit a report to the Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense on utilization of monetary resources allocated for mandatory state personal insurance of servicemen and payment of one-time assistance (Attachment No 14 to these Instructions). Concurrently lists of servicemen (members of their families) who received one-time assistance and lists of insured servicemen (members of their families) to whom insurance support had been paid (attachments No 15-18 to these Instructions) shall be submitted to the Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense.

Records shall be maintained by the Military Insurance Company on transactions regarding mandatory state personal insurance of servicemen and payment of one-time assistance separately from transactions regarding other forms of insurance.

In order to ensure supervision over the expenditure of monetary resources allocated from the republic budget of the Russian Federation for the payment of insurance support on the basis of mandatory state personal insurance of servicemen and one-time assistance, the Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense shall have the following rights, in accordance with contracts signed with the Military Insurance Company:

a) to receive, from the Military Insurance Company, reports established by these Instructions on the quantity of insurance accidents, the amounts paid out and other information necessary for performance of supervisory functions imposed upon it;

b) to conduct inspections of the Military Insurance Company's observance of legislation of the Russian Federation on mandatory state personal insurance of servicemen and payment of one-time assistance, and the truthfulness of submitted reports;

c) when violations of the requirements of insurance legislation and of these Instructions are revealed, to offer recommendations for correcting them.

31. To determine that insurance support (one-time assistance) is correctly awarded and lawfully paid, the Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense shall conduct quarterly inspections, and when necessary, inspections may be conducted at the direction of the chief of the Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense.

[Signed] Colonel General V. Vorobyev, Chief, Main Military Budget and Financing Directorate of the Russian Federation Ministry of Defense

[Signed] Major General of Medical Service I. Chizh, First Deputy Chief of the Main Military Medical Directorate of the Russian Federation Ministry of Defense

Coordinated:

[Signed] S. Tsikalyuk, Chairman, Council of Directors, Military Insurance Company

Footnotes

1. Order No 50 of the Russian Federation Minister of Defense, 1993.

2. Attached.

3. Henceforth in the text, mutilations (wounds, injuries, concussions) or illnesses will be referred to as damage to health unless specifically stipulated otherwise.

4. The agreement on the procedure of pension support to servicemen and their families and of state insurance of servicemen of member nations of the Commonwealth of Independent States dated 15 May 1992 (Tashkent) presently exists between the governments of the Republic of Armenia, the Republic of Belarus, the Republic of Kazakhstan, the Republic of Kirghizstan, the Republic of Moldova, the Russian Federation, the Republic of

Tajikistan, the Republic of Uzbekistan and Ukraine. According to this Agreement mandatory state insurance is provided to servicemen of the Armed Forces of member nations of the Commonwealth of Independent States and other military formations created by legislative bodies of these states, and of the armed forces and other military formations of the former USSR, on the basis of conditions, rules and procedures established or to be established by legislation of the member nations on the territory of which the indicated servicemen and their families reside, and until adoption of legislative acts on these issues by these states, on the basis of conditions, rules and procedures established by legislation of the former USSR. The expenses of this form of insurance shall be covered by the member nations of the Commonwealth of Independent States out of their budgets, without the use of mutual accounts between these states.

5. Henceforth in the text, the servicemen mentioned in subclauses "a"- "c" of Article 3 shall be referred to as the insured, unless specially stipulated otherwise.

6. The amount of one-time assistance paid to drafted active duty servicemen, civilians called up for military training or their families shall be calculated as the minimum wage established by law on the day of death due to accident or hostile action (natural causes) or mutilation (wounding, injury, concussion).

7. Commanders of military units shall fill out certificates in support of adoption of a decision on payment of insurance support in response to insured accidents occurring during the time of active duty by the insured (the cases indicated in clauses "a", "c" and "e" of this article);

rayon military commissars shall fill out the indicated certificates regarding insured accidents after discharge of the insured from active duty (the cases indicated in clauses "b", "d" and "f" of this article, as well as in Clause "e" of this article when the wounded individual is discharged from military service directly from a military therapeutic institution).

8. The spouse of a serviceman who has died due to accident or hostile action (natural causes) shall submit a copy of the wedding certificate issued by state registry office organs. As regards children of the killed (deceased) serviceman, copies of birth (adoption) certificates issued by state registry office organs, and when necessary, certificates from educational institutions regarding school attendance of children who have attained 18 years of age, or certificates from the medical commission for determination of disability in relation to children beyond this age who had become disabled prior to reaching 18 years of age.

9. Henceforth in the text, oblast military commissariats.

CIS: POLICY**Yeltsin Directive Allocating Accommodations for Military**

93UM0632A Moscow KRASNAYA ZVEZDA in Russian
26 Jun 93 pp 1,2

[Russian Federation Presidential Directive signed by Russian Federation President B. Yeltsin, 23 June 1993: "Russian Federation Presidential Directive 'On Measures To Provide Housing in 1993 to Servicemen, Individuals Who Have Been Released From Military Service Into the Reserve or Who Have Retired, Internal Affairs Organ Associates, and Also Their Family Members'"]

[Text] For the purpose of implementing immediate measures to provide housing in 1993 to servicemen, individuals who have been released from military service, internal affairs organ associates, and also their family members:

1. The Russian Ministry of Defense, the Russian MVD [Ministry of Internal Affairs], the Russian MB [Ministry of Security], the Russian SVR [Foreign Intelligence Service], FAPSI [Federal Government Communications and Information Agency], the Russian Federation Main Protection Directorate (Russian GUO), the Russian GKChS [State Committee for Extraordinary Situations], the Russian MPS [Ministry of Railways] Federal Railroad Troops Directorate (FUZhV), the Russian Ministry of Communications, the Federal Special Construction Directorate under the Council of Ministers—Russian Federation Government (Spetsstroy Rossii), the Russian Ministry of Atomic Energy, the Federal Road Construction Directorate under the Russian Ministry of Defense (FDSU), the Federal Specialized Directorate for Construction in the Eastern Regions of the Russian Federation under Russian Gosstroy [State Construction] (Dalspetsstroy FSU [Federal Construction Administration]) and, upon approval, the Russian Defense Sports-Technical Organization (ROSTO) will ensure the construction and introduction into operation of housing with a total area in accordance with Attachment No 1 for servicemen, internal affairs organ associates, their family members and individuals who are subject to resettlement from restricted or remote military garrisons:

The organs of executive power of the republics, krais, oblasts, federal cities, autonomous oblasts, and autonomous okrugs within the Russian Federation will carry out in the prescribed manner the allocation of the total residential building living space built according to shared participation for servicemen and internal affairs organ associates in accordance with the agreement of the listed ministries and departments, and for officers, army and naval warrant officers, and extended service military personnel who have been released from military service or who have retired based upon age, illness, staff reductions or restricted state of health, and border troops servicemen—the total residential building living space in accordance with Attachment No 2.

2. In 1993, the Russian Ministry of the Economy and the Russian Ministry of Finance provide for the allocation of state centralized capital investments for housing construction and appropriations for their financing that ensure the construction and introduction into operation of the total residential building living space in the amounts stipulated in Attachments No 1 and 2 of this directive for servicemen, individuals who have been released from military service into the reserve or who have retired, internal affairs organ associates, and also for their family members.

3. The Russian Ministry of Finance, jointly with the Russian Ministry of the Economy, prepares proposals on the inclusion of expenditures associated with financing the construction of housing for servicemen and a list of Russian Federation Republic Budget current expenditures protected budget items that are subject to being totally financed for submission to the Russian Federation Supreme Soviet.

4. The organs of executive power of the republics, krais, oblasts, federal cities, autonomous oblasts, and autonomous okrugs within the Russian Federation take the required steps to eliminate the housing allocation debt to the Russian Ministry of Defense, the Russian Federation Border Troops and the Russian MVD internal troops in 1993.

5. The ministries and departments listed in Paragraph 1 of this directive will provide for the allocation of resources in 1993 at the expense of outside budget and other sources of financing in addition to state centralized capital investments for housing construction for servicemen.

[Signed] B. Yeltsin
Russian Federation President
23 June 1993

Attachments to the Russian Federation Presidential Directive

AMOUNTS of the Total Residential Building Living Space Being Introduced Into Operation in 1993 for Servicemen, Internal Affairs Organ Associates, Their Family Members and Individuals Who Are Subject to Resettlement From Restricted or Isolated Military Garrisons (in thousands of square meters of total area)

	Total	Including According to the Plans of the Ministries and Departments
Total residential building living space	5,386.7	3,434.12
including		
Russian Ministry of Defense	3,700	2,700
Russian MVD	620	320
including the internal troops	220	40

AMOUNTS of the Total Residential Building Living Space Being Introduced Into Operation in 1993 for Servicemen, Internal Affairs Organ Associates, Their Family Members and Individuals Who Are Subject to Resettlement From Restricted or Isolated Military Garrisons (in thousands of square meters of total area)
(Continued)

	Total	Including According to the Plans of the Ministries and Departments
Russian MB	545	102
including the border troops	345	50
Russian SVR	7.3	—
FAPSI	91.8	42.5
Russian GUO	1.1	—
Russian GKChS	35	7
FUZhV	112.2	95.3
Russian Ministry of Communications	11.4	8
Russian Special Construction	18.9	18.9
Dalspetsstroy FSU	28.2	28.2
Russian Ministry of Atomic Energy	15.5	15.5
FDSU	197	96
ROSTO	3.3	0.72

ALLOCATION in 1993 of the Total Residential Building Living Space for Officers, Army and Naval Warrant Officers and Extended Service Military Personnel Who Have Been Released From Military Service Into the Reserve or Who Have Retired Based Upon Age, Illness, Staff Reductions, or for Restricted State of Health and Border Troops Servicemen (in thousands of square meters of total area)

Designation of the republics, krais, autonomous formations and federal cities	Total	Including for Border Troops Servicemen
Russian Federation—total	3,451.2	51.2
including:		
Republic of Bashkortostan	21.5	—
Republic of Buryatiya	10.9	—
Republic of Dagestan	14.1	—
Karbardino-Balkar Republic	11.5	—
Karachayevo-Cherkess Republic	11.6	—

ALLOCATION in 1993 of the Total Residential Building Living Space for Officers, Army and Naval Warrant Officers and Extended Service Military Personnel Who Have Been Released From Military Service Into the Reserve or Who Have Retired Based Upon Age, Illness, Staff Reductions, or for Restricted State of Health and Border Troops Servicemen (in thousands of square meters of total area) (Continued)

Designation of the republics, krais, autonomous formations and federal cities	Total	Including for Border Troops Servicemen
Republic of Kareliya	30.4	0.48
Republic of Komi	12.9	0.24
Republic of Mariy El	25.2	—
Mordovan Soviet Socialist Republic	10.3	—
North Ossetian Soviet Socialist Republic	15.4	—
Republic of Tatarstan	47.1	—
Udmurt Republic	23.2	—
Ingush Republic	8.1	—
Chechen Republic	2	—
Chuvash Republic	12.6	—
Republic of Sakha (Yakutiya)	4.4	—
Republic of Khakasiya	7.1	—
Republic of Kalmykiya—Khalmg Tangch	0.4	—
Republic of Adygeya	8.6	—
Republic of Gorno-Altay	3	—
Altay Kray	25.2	—
Krasnodar Kray	262.5	6.08
Krasnoyarsk Kray	25.1	—
including:		
Evenki Autonomous Okrug	0.6	—
Maritime Kray	99.1	1.6
Stavropol Kray	118.1	1.12
Khabarovsk Kray	72.5	0.96
Jewish Autonomous Oblast	5.3	—
Amur Oblast	103.9	0.96
Arkhangelsk Oblast	14.1	0.32
including		
Nenetsk Autonomous Okrug	0.5	—

ALLOCATION in 1993 of the Total Residential Building Living Space for Officers, Army and Naval Warrant Officers and Extended Service Military Personnel Who Have Been Released From Military Service Into the Reserve or Who Have Retired Based Upon Age, Illness, Staff Reductions, or for Restricted State of Health and Border Troops Servicemen (in thousands of square meters of total area) (Continued)

Designation of the republics, krais, autonomous formations and federal cities	Total	Including for Border Troops Servicemen
Astrakhan Oblast	11.2	—
Belgorod Oblast	87.3	1.6
Bryansk Oblast	45.4	—
Vladimir Oblast	77.8	1.28
Volgograd Oblast	92.8	—
Vologda Oblast	22.3	—
Voronezh Oblast	109.4	1.92
Ivanovo Oblast	29.1	—
Irkutsk Oblast	24.7	—
including		
Ust-Orda Buryat Autonomous Okrug	0.5	—
Kaliningrad Oblast	88.5	0.8
Kaluga Oblast	51.4	1.6
Kamchatka Oblast	13.5	1.28
Kemerovo Oblast	17.1	—
Kirov Oblast	42.2	—
Kostroma Oblast	28.3	0.6
Kurgan Oblast	16.5	—
Kursk Oblast	48.5	0.6
The City of St. Petersburg	32.3	2.4
Leningrad Oblast	72.5	0.88
Lipetsk Oblast	30.2	0.8
Magadan Oblast	2.7	—
Chukotsk Autonomous Okrug	0.4	—
The City of Moscow	25.2	3.2
Moscow Oblast	210.5	0.8
Murmansk Oblast	32.9	—
Novgorod Oblast	45	1.28
Nizhegorod Oblast	61.6	1.92
Novosibirsk Oblast	36.9	—
Omsk Oblast	43.8	—
Orenburg Oblast	22.2	—
Orlov Oblast	37.7	0.96
Penza Oblast	65.7	0.6

ALLOCATION in 1993 of the Total Residential Building Living Space for Officers, Army and Naval Warrant Officers and Extended Service Military Personnel Who Have Been Released From Military Service Into the Reserve or Who Have Retired Based Upon Age, Illness, Staff Reductions, or for Restricted State of Health and Border Troops Servicemen (in thousands of square meters of total area) (Continued)

Designation of the republics, krais, autonomous formations and federal cities	Total	Including for Border Troops Servicemen
Perm Oblast	34.5	—
including		
Komi-Permyak Autonomous Okrug	3.4	—
Pskov Oblast	54.7	1.6
Rostov Oblast	97.2	1.76
Ryazan Oblast	51.3	1.28
Samara Oblast	70.2	1.6
Saratov Oblast	139.5	0.6
Sakhalin Oblast	13.5	0.64
Sverdlovsk Oblast	29.7	—
Smolensk Oblast	49.8	0.8
Tambov Oblast	55.5	0.8
Tver Oblast	90.7	1.92
Tomsk Oblast	9.6	—
Tula Oblast	40.6	1.12
Tyumen Oblast	7.6	—
including		
Khanty-Mansiysk Autonomous Oblast	0.3	—
Ulyanovsk Oblast	52.4	0.8
Chelyabinsk Oblast	38.4	—
Chita Oblast	13.7	1.6
Yaroslavl Oblast	49	1.6

Barriers to Promised Land Grants to Servicemen Probed

93UM0631A Moscow KRASNAYA ZVEZDA in Russian
23 Jun 93 p 1

[Article by Lieutenant Colonel Ivan Ivanyuk and Captain 2nd Rank Yuriy Gladkevich: "Rights and Privileges to Land—in the Laws. Refusals and Bureaucratic Red Tape—in Fact: The Mechanism for Allocating Plots of Land to Servicemen Requires Serious Revision"]

[Text] "Land ho!", the lookout's enthusiastic cry has rung out more than once on the Russian ship that has been worn out by economic gales and political storms. But the fog has lifted or the light haze has dispersed—and it has turned out that it was only the latest mirage...

Among those who are impatiently awaiting the resolution of that issue are not just the confirmed agrarians and the newly made farmers but also a multitude of other Russian citizens, including servicemen. My land—that is the prospect of building a home on it, the possibility of cultivating a garden, yes, and finally, property that we can transfer to our children and grandchildren through inheritance.

The state is granting those benefits and privileges to people who have devoted their lives to military service to the Homeland. The Russian Federation Law "On the Status of Servicemen" guarantees the allocation free of charge to cadre military personnel who have the appropriate length of service and also to those who have been released into the reserve or who have retired no less than 10 hundredths of a hectare for individual housing construction and for a personal agricultural plot in cities and city type settlements, 25 hundredths of a hectare in rural areas, and no less than 30 hundredths of a hectare for conducting peasant agriculture after release from military service.

Among the latter decisions, we can cite the 23 April 1993 Russian Presidential Edict "On Additional Measures for Allotting Plots of Land to Citizens". The Edict provides for the immediate allocation of land to servicemen who are being released or who have been released into the reserve or who have retired.

The privileges have been formally introduced but in practice it turns out that it is not too easy to take advantage of them. In their letters, our readers cite quite a few examples on how they have to fruitlessly knock on every door of various levels of authority but the desired small plot of land remains just as inaccessible as the remote islands in the untrodden expanses of the ocean. For example, Moscow Oblast's Pushkinskiy Rayon Administration has already been rejecting for a prolonged period of time Armed Forces veterans' requests to allocate plots of land for gardening or truck farming. The support of the Krasnoarmeysk City Administration and interference by oblast administration representatives are not having any effect. And Retired Colonel G. Shchegonin from Moscow reports that "Veteran" Horticultural Association nevertheless managed to attain the allocation of a plot of land after long ordeals. But where—130 kilometers from Moscow and 25 kilometers from the nearest railroad station on land where drainage work needs to be conducted and a forest needs to be uprooted... And this is when two dozen disabled people are among "Veteran's" members...

If you analyze the "geography" of these complaints, it's easy to note that the overwhelming majority of them come from Moscow and Moscow Oblast. And here one of the key factors is understanding the urgency of the problem. The fact is that there are many people who desire to obtain a plot of land here, as nowhere else, and the workload on the land in the capitol region is an order of magnitude higher than in any other. By way of illustration, if the average share of land is 0.5 hectares

per person in Balashikhinskiy Rayon, it is already five hectares in Mozhaysk and eight hectares in neighboring Kaluga Oblast.

And yet the capabilities to allocate land near the capital have still not been exhausted. Suffice it to say that more than 30,000 hectares have been set aside for gardening or truck farming during the last two years, half of what was allotted for these purposes during preceding decades. Right now the glances of the local authorities are increasingly turning to Ministry of Defense lands that are being released in the process of Armed Forces reform. At first glance, there is a substantial reserve here. But only at first glance. The fact is that during the time that has passed since the "transplanting" of military units, their deployment locations have sooner become forests than open land. And many subunits that are subject to being disbanded have initially been located in remote forest areas. There aren't that many forests in Moscow Oblast—1,300,000 hectares and they are being conserved.

While considering that and many other factors, the local authorities and the Russian military department have conducted an inventory of "military" lands and more than 2,200 hectares have been reallocated to the oblast land fund. On 1 March 1993, Oblast Administration Head A. Tyazhlov's directive ordered all interested parties to determine the possibility for further use of these lands while considering Russian Federation Ministry of Defense proposals for the satisfaction of the needs of military units and institutions for plots of land for the construction of single-family housing and for gardening and 890 hectares of this land were set aside for future servicemen's horticultural associations in the form of specific "spots".

"Alas, everything isn't that simple," said Russian Federation Ministry of Defense Central Staff Commission for Single-Family Housing and Gardening Chief Colonel Georgiy Dyachenko. "We began working with representatives of rayon administrations for the execution of the 23 April Presidential Edict—and it turned out that we would hardly obtain even these 890 hectares. Some of these lands have already been arbitrarily seized by rayon residents for gardens and the local authorities had also planned to allot some to residents for various purposes. Yes and some military unit commanders that are deployed there made the land the topic of a distinctive type of trade with the administration in the interests of their units without the approval of the Russian Federation Ministry of Defense leadership.

"Nevertheless, we are doing everything possible so that a large part of the land surveyed by the Ministry of Defense was used for the needs of servicemen," said Moscow Oblast Administration Minister for Land Reform and Land Tenure Nikolay Garankin. "The requirements of the laws, presidential edicts and directorates that grant military personnel certain advantages must be completely fulfilled. But the oblast administration is not omnipotent and all rights to land have been transferred to the local level, to the rayons..."

KRASNAYA ZVEZDA has already repeatedly written about the negative consequences of such "decentralization" in the land issue—there were quite a few examples of how rural soviets or city soviets can ignore the interests of the country's defense. Then what does that say about the interests of specific Russian officers and warrant officers!

We can track all of the painfulness and burden of this process in the example of how the single-family housing construction program is being carried out in the Moscow suburbs. The Russian Federation Presidential Edict on the allocation of 40,000 hectares of land during a 10-period for this purpose was issued almost 1.5 years ago—on 4 January 1992. It would seem that this period of time is quite sufficient so that servicemen without apartments from Moscow area military units could celebrate their first housewarmings. But there's still a long way to go until that can happen. We can count the places where cottage construction has begun on one hand—Monino (Air Force), Naro-Fominsk (Main Construction Industry Directorate) and one address in Moscow PVO [Air Defense] District.

Why is it taking so long to do everything? As you have certainly already guessed, the primary stumbling block is once again land. By way of illustration, look at how the issue is being resolved of changing the intended purpose of a 130 hectare plot of land near Podolsk, on the territory of the former "Kuznechiki" Military Airfield. Already at the beginning of last year, the Military Construction Units Veterans Council, jointly with RIFF (Russian Immigration Finance Fund) Joint Stock Company, proposed building on that location 1,000 cottages for servicemen who are forced resettlers from nearby foreign countries and veterans of the Armed Forces. The issues of financing, construction materials, equipment, and the work force have been resolved and the technical-economic substantiation has been compiled. In short, everything has been done and the cottages would have already been ready last year and would have eliminated burning housing problems if only for several hundred Russians. If not for the position of Podolskiy Rayon. After many months of red tape, it finally issued a finding: we consider the use of the land indicated for construction of single-family and multi-family housing to be possible once the land has been allocated between the Russian Federation Ministry of Defense, the city of Podolsk and Podolskiy Rayon, respectively. It would seem that things have begun to move. But three more months have passed and everything has remained as before.

We instinctively recall the Russian saying: "It looked good on paper but we forgot about the pitfalls". And, as you can see, there are more than enough pitfalls on the path to your own plot of land. Right up to those that are man-made, and for quite transparent reasons. There is a reason that the 23 April 1993 Russian Federation Presidential Edict contains the following paragraph: "The Russian Federation Ministry of Internal Affairs will take

the required steps to discover and stop cases of corruption, bribery, and extortion when granting plots of land..."

Servicemen who have been released into the reserve or who have retired turn out to be the least protected in the face of local bureaucrats and officials. Considering that prospect, the Russian Federation Ministry of Defense GlavKEU [Main Billeting Operation Directorate] would not object, say, if 20% of the plots of land were allocated to provide garden plots to non-working pensioners from among servicemen at the expense of subdepartmental territories.

There is also another proposal that, we hope, will find support—to restrict the time period of review of proposals and appeals on the land issue if only to two months. For now they are extendible and it seems that they can be endlessly extended...

Reduced Salaries Possible Measure to Stabilize Budget

93UM0648A Moscow KRASNAYA ZVEZDA in Russian
2 Jul 93 p 1

[Article by Anatoliy Stasovskiy: "The Budget Demands Victims"]

[Text] In connection with the country's very difficult financial situation, a government draft provides for certain measures to stabilize the budget. One such measure is a cut in financial expenditures to maintain the army. For now, of course, it is not clear which of the government's proposals will receive the approval of the Russian parliament.

According to information which we managed to obtain in the parliamentary Committee for Questions of Defense and Security, article 20 of the budget draft for 1993 will basically be devoted to military questions, so to speak. In particular, it proposes suspending a number of articles of the Law on the Status of Service Members. We shall enumerate them without expansion, which would take up too much space: art. 13 p. 2 and 5, art. 14 p. 4, art. 15 p. 9, art. 16 p. 4 (in the part having to do with monetary compensation for service members and their families when they go on leave), art. 18 p. 4, art. 20 p. 1 (the part which has to do with free travel on public transportation). Certain other changes are also provided for.

In the Committee on Questions of Defense and Security, which is participating in a discussion of the budget draft, it was said that a separate decision will be made regarding each article of the Law On the Status of Service Members, and that everything must be duly weighed. However it was stressed that it will most likely be necessary to approve the government proposals with respect to suspending the articles of the law having to do for example with free travel on all types of public transport of municipal, urban, and local transportation lines, and with free shipment of household goods of service members of over 5 tonnes.

The basic reason why such an unseemly situation has arisen around the Law on the Status of Service Members is understandable: the budget deficit and high spending. Some specialists are even naming the amount required for normal operation of the law: two trillion rubles. A lot, you must admit. It is also understandable that there is nowhere to retreat, and that it is necessary to correct the economic and financial situation of the country. But there is only question: is it possible that this was not known and understood just a short time ago, when the law was passed?

CIS: STRATEGIC DETERRENT FORCES

Future of Plesetsk Space-Launch Facility Pondered

93WC0091A Moscow ROSSIYA in Russian No 29,
14-20 Jul 93 (Signed to press 13 Jul 93) p 9

[Article by Galina Mashtakova under "Shield and Sword of the State" rubric: "Space Knights of Russia"]

[Text] The lads of the Military Space Forces of the USSR solemnly guarded the main military secret of the country—their involvement in the romanticism of space investigations. And to get through the difficult days and nights, they hid from the eyes and ears of their compatriots in the impenetrable taiga of Arkhangelsk. The official date of the birth of the "Plesetsk" space-launch facility is considered to be 15 June 1957. Only then it was called something else—a range for testing military missile hardware....

And while the world was enjoying the smile of Gagarin, the "secret physicists" from the military space department covered themselves in the direct sense of the word with the nuclear-missile shield of the country of the soviets and wrote their scenarios for space wars with the damned bourgeois....

With perestroyka, the Military Space Forces became an independent branch of the Russian Armed Forces, having separated themselves from the missile forces. And they really obtained a special status with the collapse of the Soviet Union. For only they are now prepared to answer the question of whether or not Russia is to be a space power. Today the fate of Baykonur depends on the competent, intelligent, and calm politician Nursultan Nazarbayev. But what will tomorrow bring? According to the apt comment of one of the officers of the military space forces, the time may be coming when only camels will graze at our "Canaveral." And this means that the space-launch facility at the Plesetsk test range near Arkhangelsk is the only hope and support for Russian astronautics.

Where does the Ho Chi Minh Trail lead?

To some degree or other, everyone knew about the secret of its existence. And before anyone else, of course, the potential enemies knew. At the beginning of the 1960's, they took the bearings of the second or third launch of a space vehicle. From that very moment, the secret test range in the north was under their close observation,

even to the point that articles about it were published in the popular journal YUNY GEOGRAF [Young Geographer]. Shortly after that, local Arkhangelsk pathfinders made a path in the taiga that they cleverly named Ho Chi Minh. And by no means did they do that to spy or admire the "taming of fire" but with the sole more than earthly goal of supplying themselves with inexpensive delicacies and "privileged" industrial goods. That was during the time of stagnation, when different kinds of sausage quietly lay only in towns like Zvezdnyy. And bananas cost 1 ruble 80 kopecks at Mirnyy (a closed military town at the Plesetsk test range).

Officers now remember those heavenly times with sadness in their voices, although even now they live rather well. In any event, you cannot compare the people here at Plesetsk with those unfortunate people who are being moved from far-away places abroad to an empty place or with those whom perestroyka caught by surprise in nearby foreign territory. And neither they nor their relatives want to "open" their closed city: in a local referendum, 90 percent of the population spoke out against "breaking windows" in the civilian civilization. The city lives under its own military laws and precisely this helps people to work and honestly to perform their duty to their homeland despite the general disorder.

But however they call what was spread out near Plesetsk—the "younger brother of Baykonur," "Plesetsky Space-Launch Facility," and "International Space Center Plesetsk"—it was conceived and begun as a range for the testing of combat missiles. And the first bosses here were missile people. These missiles that once stood on alert status now launch space vehicles. And in those days, when they were aimed at the United States, Nikita Sergeyevich Khrushchev pounded his shoe on the speaker's stand of the United Nations and threatened to use them.

Conversion of the "Topol"

From a discussion with Gen A. Perminov, chief of the test range:

[Question] Anatoliy Petrovich, we keep on disarming and setting up American monitoring equipment everywhere that it is possible to do so. In one sense, this is remarkable—we are ceasing to frighten the world. But is it not so that there must be reasonable limits to everything on earth? Missile forces are strategic forces. And if we think "strategically," then are we not depriving our children and grandchildren of a "shield"?

[Perminov] Well, in the first place, we are setting up the equipment not only here but there as well—in accordance with the agreement, as they say. And as for missile technology, no one has taken this task away from us.... Programs are being worked out and science is thinking. And it is our "own," by the way. To be sure, no matter how many scientists are trained in our postgraduate study, Moscow takes them away from us. And that is understandable, for they are first-class specialists! Here science is applied in nature: technology and testing. There are, of course, complications with financing—

there are no longer the sort of "injections" that we had before. But, as long as there are prospects of development, this means that there is stability and people can work quietly. A year or two ago, many were deserting the army, for the "market" was promising a more abundant life as civilians. We were affected by this too. We caught the fever. The result was that the most dependable people remained. And this is important: we are forces with greater responsibility.

We would like to be hopeful at least with respect to the notorious nuclear warheads....

This year the missile people have carried out the latest conversion program: on 25 March, the intercontinental ballistic missile "Topol" launched a space vehicle for the first time. Previously after testing such missile complexes were simply blown to pieces, which did not by any means increase their efficiency. Now space vehicles will be launched on the basis of a modified "Topol." The next launch will be in the fall. Naturally it will be for national economic purposes....

In general, the rumors about the "dreadful" military function of the test range are greatly exaggerated. Yes, here there actually was a training center for the retraining of military specialists of the missile forces: officers and soldiers master new equipment and here they acquire it and set off for their place of service. This is how it is: equipment is improved and so are people. But practically every month the chief of the test range has to appear at various meetings of vigilant "servants of the people" and explain that the missiles are being tested without a "filling" and that there are no nuclear weapons at Plesetsk and never were. If the "filling" was tested, then it was at Novaya Zemlya and Semipalatinsk. Here they teach people to maintain and service that which is on alert duty in different corners of our immense Russia. Without a doubt, the inhabitants of Arkhangelsk Oblast have reason to be concerned about ecological safety. But they are clearly not looking for the source of the danger there. God knows that the local Plesetsk officers are not about to feed their own children nuts and mushrooms gathered in their spare time beyond the barbed wire. They if anyone know how edible the gifts of nature are. And the presence of grayling in the stream near the launch facility indicates something....

And with the passage of the years, the space-launch facility itself becomes quite "peaceful" [mirnyy] in accordance with the name of the town.

The Magic of Figures

From a conversation with A. Ovchinnikov, chief of the center for the testing of space vehicles:ed

Somehow in our consciousness the mastering of space has become firmly associated with the names "Baykonur" and "Kapustin Yar." But scarcely anyone knows about the hard work that is done at Plesetsk. We carry out two-thirds of the country's space program. In America, they prepare half a year for one launch,

whereas we have 50 to 60 launches a year. There were 82 launches in 1978! And practice has now shown a reliability of 0.98.

For this reason, the Americans themselves prefer to launch their space vehicles from Plesetsk—cheaply and reliably.

"0.98" means an almost 100-percent probability of success. Almost.... They showed us the monument with the eternal flame and reservedly and briefly commented: "Those are our boys." Here the questions stop at once. It is painful to remember how within just a few minutes the launch pad became a huge melted field in the midst of the taiga. After the last accident, the fourth launch complex (there are a total of nine here) was in a process of restoration for three years. And it was precisely from it, from the fourth, that in our presence the space vehicle "Resurs" (to investigate the natural resources of the earth) was put into orbit with the "Soyuz" launch vehicle. For three days, a combat crew of a unit of the military space forces prepared it for launch—from that very minute that the space vehicle joined to the launch vehicle on the erector began to move smoothly on rails from the assembly and testing building to the "iron hectare" (as the officers call the launcher). And by tradition, the unit commander walked all the way down the cross ties in front of the rocket—just to make sure. Korolev was the first to go this way before launch in the early 1960's.

There are 260 little stars at the launch facility. That is how many launches there have been. The facility is honored. In such cases, they say that it is time to retire. But...there is no replacement, just as there is no Ukrainian Soviet Socialist Republic, the homeland of the facility. Orders are now being distributed to military plants of Russia on an urgent basis. St. Petersburg promises to deliver a new launch facility by 1998. If only that were all! For three months now, Shostka has not been sending film. They are raising their prices and demanding hard currency. Because of this, they cannot launch the space vehicle "Kobalt." The officers are perplexed: "We went there and there is nothing much going on. Even the flies are buzzing around the shops. Can it really be that 'Svema' or 'Tasma' cannot make this film?" And they add: "Russia must have everything that it needs so that it does not have to get down on its knees."

Getting Off Their Knees

That is all so. It is not right for Russia to be on its knees and especially because of cable fuses and electrical equipment for ground verification of launches from Kharkov or refueling hoses from Belarus. The establishment of our own "space" infrastructure on Russian soil is an indispensable condition for us who lay claim to being a space power.

By the way, the missile people here have certainly shown themselves to be "forces with greater responsibility." Their "losses" from the disintegration of the Soviet Union are much less than those of others. It is apparent

that they benefited from their specificity and secrecy. Most of the equipment was produced at Russian plants but within a year it was possible to distribute the orders that were oriented toward nearby foreign countries to the "middle strip of Russia," figuratively speaking.

Once again you involuntarily think about the responsibility of politicians for our security. It may be that it is again necessary to show restraint and not to "slam the door," calculating a few moves in advance what is advantageous for the Fatherland.

With the background of general and local disarmament, it appears that the Plesetsk test range is not losing its importance but rather is becoming more important. It is not for nothing that the president of the country, the commander in chief of the Joint Armed Forces of the CIS, and the Minister of Defense of Russia visited here in the last year. And one of the latest launches was observed by M. Kolesnikov, chief of General Staff of the Ministry of Defense of Russia, and V. Ivanov, commander of the space forces, along with us.

To remain one of the major and leading powers, Russia needs a dependable nuclear-missile shield and prospects for the development of space research.

And in this connection, it is by no means unimportant whose hands are operating "ground" and "underground" control consoles. When he left us, Gen A. Perminov said: "I am quite confident that there will be no tragedies and no accidents in the missile forces...." One would like to believe that. And let the "probability of 0.98," as the missile people and cosmonauts say, always be confirmed with a reality of 1.0.

CIS: GROUND TROOPS

Fire Destruction of the Enemy in an Offensive

93UM0540A Moscow VOYENNOY VESTNIK
in Russian No 3, Mar 93 pp 79-80

[Article by Colonel N. Yants and Candidate of Military Sciences Major P. Dulnev under the rubric "For Those Entering the Academy": "Delivery of Fire Against an Enemy in an Offensive"]

[Text] The delivery of fire against an enemy is understood to mean comprehensive firepower used against him by various forces and types of weapons and strikes by missile troops and aviation using missiles and conventional ordnance, as a result of which the positions (targets) lose their combat capability either entirely or partially. It is organized to the entire depth of the combat mission of the battalion. Preparation fire is conducted before an attack by motorized-rifle and tank subunits, and fire support and close fire support for the offensive of the subunits is conducted in depth in the course of an offensive.

The **preparation fire** for the attack begins at a designated time, and concludes when the first-echelon subunits reach the final coordination line.

The **fire support** for the attack begins with the end of the preparation fire (without any pause), and is conducted continuously in depth against the defenses of the enemy brigade (regiment) of the first echelon (8—10 km [kilometers], sometimes even more). The principal efforts are concentrated on defeating positions and targets in the first position.

The **close fire support** for an offensive by subunits in depth of the enemy defenses begins after the completion of fire support, and is conducted throughout the entire battle.

In a case where a battalion is attacking as part of the main forces of the regiment, the greater portion of the questions of fire delivery are decided by the senior commander. If that task is being accomplished independently, apart from the main forces, the delivery of fire against the enemy is organized entirely by the battalion commander.

With that aim, he usually determines in his **general plan**:

- the tasks of the organic and attached artillery by periods of fire delivery;
- the procedure for the destruction of the enemy by fire from tanks, IFVs (APCs), grenade launchers and other firepower in the fulfillment of the mission; and
- the readiness times.

The battalion commander, in the combat order for the **assignment of missions**, indicates:

- to the attached subunits of artillery and the organic mortar battery, the targets to hit during the period of preparation fire and, with the start of the attack, whom to support and the tasks in supporting the entry into battle of the second echelon, as well as the repulsion of enemy counterattacks, their firing positions, the routing and order of advance, the time to be ready to open fire and the order of movement;
- to guns and tanks assigned to fire by direct laying-in, the targets to hit during the period of preparation fire and with the start of attack, the firing positions, the routing and order of advance, the direction of fire, the time to be ready to open fire, whom to support, the tasks to support the entry into battle of the second echelon, coverage of the flanks, the repulsion of counterattacks by enemy infantry, the place of the battalion in the order of battle and the order of movement; and
- to the antitank subunit, the targets to destroy during the period of attack preparation fire, the firing positions, the time and order for taking them up, the place in the battalion order of battle, the direction and order of movement in the course of battle, the tasks for which to be ready and possible lines of deployment.

During the course of **reconnoitering**, the battalion commander clarifies:

- the disposition of enemy firepower, especially anti-tank;

—the targets (positions) subject to the delivery of fire; and

—the firing positions of organic and attached firepower.

When organizing **interaction**, the battalion commander:

—coordinates the order for the delivery of fire by periods;

—clarifies the order and times of advance of artillery and firepower assigned to fire by direct laying-in, and their occupation and preparation of firing positions;

—indicates the distribution of enemy positions (targets) for the delivery of fire by artillery and other firepower;

—determines the order of transition from preparation fire to fire support for the attack, as well as the start and end of firing by weapons assigned to fire by direct laying-in, and their further actions;

—establishes the procedure for calling for, shifting and ceasing fire in the course of battle;

—coordinates the fire of artillery and strikes by aviation in the operations of subunits in the breakthrough of defenses and the development of the offensive, the repulsion of counterattacks, the entry of the second echelon or reserves into battle and the resolution of other tasks; and

—clarifies the methods of designating the front line and the procedures for target designation for aviation.

All question of the delivery of fire are drawn up on the commander's battle map.

The preparation fire for the attack is begun at the stipulated time on signal (command) from the senior commander. The tanks, antitank missile launchers, guns and other firepower assigned to fire by direct laying-in destroy and suppress enemy targets at strongpoints in the first position during the course of it.

The subunits attack with the support of artillery fire and air strikes, including combat helicopters. The organic and attached artillery moves to new firing positions by directive of the battalion commander, usually after the attackers have taken the enemy platoon strongpoints.

An important, and sometimes even decisive, role in achieving the goals of an offensive thus belongs to the delivery of fire against the enemy. The outcome of the offensive battle will depend on the skill of the battalion commander in organizing it, controlling the fire from all weapons and rapidly and artfully utilizing the effects of the firepower on the enemy.

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A Stable Defense Requires Active Fire Power

93UM0540B Moscow VOYENNNY VESTNIK
in Russian 22 Mar 93 pp 24-25

[Article by Colonel (Retired) V. Savelyev: "Defense—Firmness Plus Aggressiveness"]

[Text] All are seemingly against stereotypes in military affairs, however they may be expressed, and understand the danger of them. But if one looks attentively at field practices, the schism that exists in a number of units between verbal declarations of the importance of the new and progressive in tactics and the actual deeds to bring the new to life is striking. Using the example of the exercises of a motorized-rifle battalion under the command of Major N. Rusov, we will try to analyze where the clichés come from and how they are most often manifested.

We will begin with the fact that the battalion, with the standard composition and regular reinforcements, went for the exercises to a training ground that was well known to most of the participants. That was one of the reasons for the attachment to a long-standing scheme when preparing the defense. An adherence to the fulfillment of standard recommendations and norms without proper regard for the situation was observed among many officers. No one, of course, will deny their well-foundedness. There is also no doubt that they must be known, since they serve as the foundation without which creativity in tactics is impossible. But the desire to follow the letter, rather than the spirit, of the regulations played a cruel joke on the participants in the exercises, leaving no room for initiative and independence. The configuration for the defense of the battalion area could boldly be put into an instructional reference as a standard.

Experienced combat engineers had the widespread conviction during the last war that the clearing of a whole mine field posed no difficulty with the detection of two or three mines. It is the same with the structuring of the defense. If nothing unexpected for the enemy is introduced into it, he can easily reproduce all the rest of the elements of the order of battle according to one or two "decoded" elements of it. The necessity of structuring the defenses in non-standard fashion is dictated by the fact that the battalion will now not only have to repel a mass attack from the front, but will also have to fight against raiding parties, airborne assaults and air-mobile enemy troops operating in accordance with the principles of AirLand battle. The requirements for the firmness of the defense are increasing under conditions of the widespread employment of high-precision weaponry (VTO). It cannot be ensured without taking appropriate measures to protect the personnel, armaments and combat hardware. And that will undoubtedly have an effect on the arrangement of the defenses.

Major Rusov justly felt that the most reliable method of reducing losses was to make pre-emptive fire strikes against elements of the enemy VTO. No less important is the comprehensive camouflaging of the troops against detection by every means—from electro-optic to radar. Smoke screens created by artillery, combat vehicles and personnel with the aid of smoke pots and grenades were thus used for that purpose in the exercises. The use of smoke in a way that was not sufficiently well thought-out, however, led to a reduction in the effectiveness of fire by their own weapons. The traditional use of the

organic camouflaging sets also had little effect on reducing the accuracy of enemy fire. They were thus able neither to destroy the elements of the VTO systems nor to protect against their strikes as a result of the stereotypical actions.

One way of solving the problem was seen in imparting greater firmness to contemporary defense through the periodic changing of areas and positions. The second echelons (reserves) have most favorable conditions for that. Maneuvering is also not ruled out, however, for the subunits in the first echelon as well.

During the war years, for example, roving firepower caused no little trouble to attackers. Today armored groups of companies and battalions could maneuver. They are created in the subunits for the purpose of increasing the activeness of the defense and for the timely reinforcement of its stability in the most threatened sectors, closing breaches that are formed as the result of enemy firepower and performing other tasks requiring energetic, maneuvering operations. The possibility arises therein of the more complete utilization of the combat capabilities of the tanks, armored infantry vehicles and armored personnel carriers.

The maneuvering of combat vehicles to temporary and back-up positions was not envisaged at all in Major Rusov's battalion. In summing up the aforementioned, it may be asserted that a firm defense is inconceivable without active maneuvering. Its activeness today, at the same time, should be manifested first and foremost in the reinforcement of the firepower against the enemy, while maneuver is called upon to provide for taking up the most advantageous position for firing or, on the contrary, evading hostile fire.

It has meanwhile become a cliché in exercise practices to provide for counterattacks for the purpose of destroying subunits that have driven into the defenses. This exercise was no exception. A company in the second echelon carried out a counterattack under the "tried-and-true variation" when the enemy took one of the platoon strongpoints. Combat experience, meanwhile, shows that they are far from always successful. In July of 1941 in the area of Berdichev, for example, the enemy was counterattacked by three of our regiments in succession that had been removed from another sector. Their strikes did not achieve their aim, however, and somewhat later the fascist troops forced a breach in our defenses right in the sector that had been stripped.

It is clearly advisable to conduct a counterattack by the forces in the second echelon only in interaction with the second echelon of the regiment, when the enemy has been reliably suppressed by fire. That does not, of course, signify the rejection of preparations for maneuver by some forces, or all of them, from one sector to another in places where a real threat of penetration of the defense arises.

The decisive role nonetheless belongs to fire maneuver. How can one really expect success from a counterattacking company if it has not been possible to strike the

enemy beforehand with fire from all weapons and disrupt his battle formations? The attackers, after all, have a great superiority in manpower in the section of penetration, frequently three or four times or more. It is not for nothing that they rejected counterattacks using the manpower of a squad, platoon or company in the second echelon of the corresponding subunits, as used to be recommended, during the years of the last war.

The task of the battalion in such a case should clearly consist not of restoring the lost position at any price, but rather of striking the enemy using firepower so as not to permit an expansion of the area of penetration, and to cut off the second echelon (reserves) from the forces that have driven their way in. The battalion commander, in my opinion, should inform the headquarters of when it would be advisable to begin a counterattack by the second echelon of the regiment. He is, after all, observing directly the results of the delivery of fire against the enemy, and it is easier for him to determine whether the subunits that have penetrated have spent themselves or not. A moment of unstable equilibrium, when the enemy is not now in a state to attack and has not been able to augment his efforts using available reserves or to go over to the defensive, is the most advantageous for a counterattack. But I want to emphasize once more that this is not only by the company of the battalion second echelon, but also by the forces of the regiment.

No attempts were even made during the exercise being considered to run through actions in withdrawal and battle in encirclement. One must undoubtedly cultivate in the personnel steadfastness and a readiness to hold firmly the lines they occupy. But sometimes a dilemma has to be resolved—to defend a position to complete annihilation of the subunit or to withdraw it to a more advantageous line, where it will be able to continue the battle against the enemy. The basis for making a decision in this case would seem to be the following criteria: if the enemy has been able to determine precisely the structure of the order of battle of, say, a battalion, the positions of its firepower and is inflicting heavy losses on it through fire, has felt out the boundaries and flanks and is outflanking them, and there are lines suitable for the defense in the rear that have been prepared in an engineer regard, it would be more expedient to make a withdrawal.

The problematical questions of modern defense require solutions. It is time to move from argument to concrete actions. There was unfortunately little of the latter in the exercise we have been discussing. Theoretical searches should move on to practical tests in the field and, after widespread experimentation, be incorporated into practice.

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1st Deputy Commander of Volga MD on Peacekeeping Forces

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22 Mar 93 pp 2-5*

[Interview with Volga Military District 1st Deputy Commander Lieutenant-General Anatoliy Aleksandrovich

Shapovalov by Colonel A. Bondarenko: "The Volga Soldiers Try on the 'Blue Helmets'"

[Text] Lieutenant-General Anatoliy Aleksandrovich Shapovalov is the first deputy commander of the Volga Military District. He was born in 1939 in Rostov Oblast to a peasant family. He completed a construction tekhnikum, the Tashkent VOKU [Higher Combined-Arms Command School], the Military Academy imeni M.V. Frunze and the Military Academy of the General Staff of the Armed Forces of the USSR.

He has served in command positions in the Turkestan, Far East, Baltic, Volga and Transcaucasus military districts. He fought in Afghanistan as the commander of a division, and after the withdrawal of the troops was an advisor to the ministry of defense of that republic. He performed the difficult duties of commandant of one of the areas of the city of Leninakan, destroyed by the earthquake; he has served as a commander in Sumgait and Baku.

He has been awarded the orders of the Red Banner and "For Service to the Motherland in the Armed Forces of the USSR" 2nd and 3rd degrees.

He is married, with two sons. Both are lieutenants and platoon commanders.

Peacekeeping forces of the Commonwealth have been created by decision of the heads of state of the CIS. One of the divisions of the Volga Military District [PriVO] has become the core of them. We asked the first deputy commander of the PriVO, Lieutenant-General Anatoliy Aleksandrovich Shapovalov, who is responsible for the reconfiguration of the division, to talk about the problems connected with its establishment.

[A. Bondarenko] Anatoliy Aleksandrovich, one-time Chief of the General Staff and First Deputy Minister of Defense of the Russian Federation Colonel-General V.P. Dubynin reported in an interview with the newspaper IZVESTIYA that a motorized-rifle division from the Volga Military District is preparing to perform peacekeeping functions under an agreement among the heads of state of the CIS. What can you add to that?

[A.A. Shapovalov] One of the units in our district (the 27th Guards Motorized-Rifle Division) has indeed been transferred to the peacekeeping forces, the foundation of which is units and subunits of the airborne troops as before. The division began performing the assigned tasks back in August of last year. The 433rd Motorized-Rifle Regiment imeni Don Cossacks in particular went to the Dniester region in July, and is successfully performing its peacekeeping mission.

Three such regiments in all have been formed, but they have a new organic structure. They are armed only with light firearms, armored-personnel carriers and trucks. There will be no artillery, tanks or air-defense weapons in those units.

[A. Bondarenko] One could say, therefore, that the future core of peacekeeping forces for the Commonwealth nations, similar to the "blue helmets" of the United Nations, has been created on the basis of the 27th Motorized-Rifle Division. What functions will the units of the division have to perform?

[A.A. Shapovalov] The range of tasks of the peacekeeping forces (MS) is determined by special guiding documents. They are quite extensive. They are, first and foremost, the performance of measures to separate armed formations of the sides and remove them to a distance that is defined by combined control commissions. The duties of the MS include the pursuit, apprehension or destruction by fire of groups and individuals who are not following the rules of a given situation. These units and subunits block traffic routes in a zone or corridor with special status, perform commandant service, and control the passage of people, hardware and freight. The units of the peacekeeping forces organize close interaction with local law-enforcement bodies to maintain the stipulated rules in a conflict zone and security corridor. They assist the population in bringing in foodstuffs and water and offer medical assistance, as well as assisting in the restoration of destroyed infrastructures. The MS conduct reconnaissance of all types for these purposes. They post troop details, patrols, sentries, observation posts and ambushes in the regions being monitored. They check the documents of citizens, inspect freight and means of transport, detain violators and take away weapons and ammunition. Where necessary they can also wage combat operations using all available types of weaponry and combat hardware. Our "blue helmets" have plenty to do overall.

[A. Bondarenko] So our regiment in Moldova clearly had to be engaged in all this?

[A.A. Shapovalov] Yes, the personnel of the unit, along with subunits of the airborne troops, have carried out the complete separation of the warring sides in their zone. They have taken away artillery, all heavy weapons and combat hardware, created a security corridor and thereby provided for a peaceful life along both sides of the Dniester. Combat operations in that area have been curtailed entirely today, and quiet and tranquillity have ensued. The military people have done their tasks successfully. The making of political decisions is required today. The troops cannot be at the posts and create a buffer for the warring sides permanently. The politicians must determine the status of the Dniester region more quickly, so that conflict does not break out again.

[A. Bondarenko] Anatoliy Aleksandrovich, who would you name among the officers of the regiment who particularly distinguished themselves over that time?

[A.A. Shapovalov] The regiment is commanded by Lieutenant-Colonel Vladimir Fedorovich Nikishin. He handled his tasks. And much better than his predecessors from the Leningrad Military District.

I would like to note the independence and responsibility for decisions made by the battalion commanders, Lieutenant-Colonel Aleksandr Vyrvich and Major Sergey Petrenko. Their battalions were in the towns of Kochiyery and Dorotskoye in the environs of Dubossary.

The regimental subunits—communications, reconnaissance, combat-engineer, repair and logistical-support—are also performing their tasks quite well. The commanders named good officers and NCOs when forming up the regiment. They are providing reliable service at their posts and on field details and patrols.

[A. Bondarenko] What are the terms on which the soldiers and officers of the peacekeeping forces are serving?

[A.A. Shapovalov] The servicemen of the regiment have signed two-month contracts. They will all be equated to the participants in a war—every month of their service is counted as three. They receive from 8,000 to 12,000 rubles a month, aside from their pay, that is indexed to the rate of inflation. Each enlisted man thus has a salary of 8,000 rubles, a junior sergeant 8,200, a sergeant 8,300 rubles and so forth.

It is thus not surprising that most of the servicemen of the regiment have expressed the desire to continue their service in the Dniester region. The commanders of the district will study this issue, and will then make a decision on replacements. I think that we will keep those who wish to remain, and will replace only those who are being discharged into the reserves.

[A. Bondarenko] The parents and those close to the soldiers and officers of this regiment are worried about their fate. Tell me, how safe is it to serve in the subunits of the peacekeeping forces? Have there been instances of attacks on the servicemen of this unit?

[A.A. Shapovalov] I can reassure the soldiers' mothers that there have been no attacks. There have only been instances of a failure to fulfill the requirements of troop details on the part of civilians, and they were a little drunk anyway. I would add that representatives of the committee of soldiers' mothers from Volgogradsk, Hetman Meshcheryakov and Cossacks from Rostov Oblast have gone out to Dubossary and visited the regiment imeni Don Cossacks. They were convinced on the spot that everything is fine there—their children are safe and have been furnished with everything they need. The servicemen are living in sanatoria, and the posts have been positioned along the track of the separation line. There is thus nothing for the parents to worry about.

[A. Bondarenko] Yes, Anatoliy Aleksandrovich, these are good facts. But perhaps there are many problems connected with the creation of the peacekeeping forces as well? Tell us about them.

[A.A. Shapovalov] There are indeed quite a few problems. I will enumerate some of them.

The first is connected with the acquisition of personnel for the units. One cannot staff peacekeeping forces on a voluntary basis, in my opinion. The military units are fulfilling their tasks. Servicemen should be subordinate to military laws. If this is done on a voluntary basis, under contract, then it happens that "I'll do it if I want to, and I won't if I don't." The task cannot be posed in that way for the military. The correct decision, I feel, has thus been made—be there as part of one's own subunit for a span of two months. And if you want to, then go ahead, stay for a longer time.

But I favor having people perform this task for no less than half a year, and not just two months. Why? The transport alone will be too expensive for us. By the beginning of September we had to pay 8,000 rubles for one railcar (flatcar) to Moscow. Moldova is several times further from the PriVO than Moscow, and it thus costs several times more to get there. Transporting our materiel back and forth, changing the personnel every couple of months, I repeat, is a too expensive "luxury" for the state. They thus have to be changed once every six months. People get better accustomed to the situation and settle in to their locations over that amount of time, by the way.

A second problem is that we have to convert these units to new models of combat gear. The peacekeeping forces currently are equipped with the old BTR-70, which is 12—15 years old. Their production has been curtailed. There are almost no spare parts. It is very hard to keep them in combat-ready condition and to repair the vehicles.

The BTR-70 is furthermore not able to make large movements in the rain on the chernozem of Moldova. Tracked combat vehicles are needed for rapid maneuvering. And if the units have to operate in mountainous terrain, our BTR-70s with their low-power engines are simply unsuitable, as was demonstrated by my experience when serving in Afghanistan and the Transcaucasus; we have to switch to newer armored personnel carriers or infantry fighting vehicles.

A few other problems are also "tied" to the BTR-70. One of them concerns the selection of drivers. We just filled the positions of drivers of wheeled vehicles, and we have found just 18 people for the BTRs even though hundreds are needed. We will train them ourselves, since they are not training drivers at the OSTO schools today.

There is another problem related to the provision of the units with fuels. That same BTR-70 is a guzzler of a vehicle—it burns one liter of gasoline per kilometer. That is a great deal, especially today under conditions of scarcity and sharp increases in the cost of petroleum products. The conclusion: we have to switch to powerful and economical diesel equipment. And moreover of the same type. We are still sending hundreds of tonnes of fuels to Moldova, which costs Russia a great deal indeed.

A whole series of unresolved issues has arisen in connection with the novelty of the very task of creating an

operating formation of peacekeeping forces in "smoothing out" their standard gear. The problem of communications gear, for instance. The units in a motorized-rifle division operate at distances of dozens of kilometers. The distances for the peacekeeping forces, however, are obviously counted in many hundreds of kilometers. The regiments have to be supplemented with space and other communications gear, and the battalions with medium-power radio sets.

Or, say, the resolution of issues connected with amenities for officers and enlisted men. We are supplementing these independent subunits with officers' messes (for each battalion) and giving them laundries, field baths and field bakeries. This is life, and you can't run away from its realities. We must, in short, create an organic structure that would ensure mobility and independence for each battalion.

There is one more interesting element—we carry mortar batteries, air-defense battalions and tank battalions in the division, which are not suitable for peacekeeping forces. I feel that we need basic subunits using IFVs, the personnel of which can be used as ordinary riflemen, instead.

Or take those 120mm mortars. They are suitable for flat terrain, but not for the mountains—they are too heavy. We need the light 82mm portable mortars. There is, that is to say, still a great deal to be considered, refined and checked, proceeding from the experience of operations in Afghanistan and the nations of the Transcaucasus...

Many of us, starting with the commander, served in Afghanistan, there in Moldova and in the Transcaucasus, and have a great deal of experience and knowledge. And I think that we will find the most optimal solution for the standard organizational structure.

[A. Bondarenko] All of this clearly pertains to the training of the personnel in the subunits of the peacekeeping forces, which is also of a specific nature, as well?

[A.A. Shapovalov] Of course. We have never studied such topics in combat training classes as the screening of terrain and populated areas, operations at a post and the like. Officers and soldiers have moreover come into the division from all over Russia now—from the Ural, Siberian, Leningrad and other districts. We spend a month with them in a special program of individual training and combat teamwork training for the subunits—platoons, companies and batteries. All of this will conclude with combat firing and command-staff exercises.

The program for training the units in the peacekeeping forces was developed by the Chief Directorate of Combat Training for the Ground Forces, based on the program for the UN "blue helmets" and with a regard for our experiences in Afghanistan, the Transcaucasus and other "hot" spots. Today it is important to teach the soldiers and young officers what we have already encountered at the posts and outposts, say, under the same conditions in Azerbaijan or Armenia. And no

textbook has anything to say on this; the experience is not discussed and is being lost. How, for example, do you carry out the safe inspection of motor transport, or the verification of documents? How do you set up a barrier using materials at hand, protective signals or organize meals at the posts? All of these are far from idle questions. And we are trying to resolve them, along with other tasks, in correct and immediate fashion.

[A. Bondarenko] Thank you for the discussion, comrade lieutenant-general.

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Development, Technical Specifications of 'Uragan' Launcher

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2 Jul 93 p 2

[Article by KRASNAYA ZVEZDA Correspondent Colonel Vitaliy Moroz, under the rubric: "Arsenal": "Uragan"—the Grandson of 'Katyusha']

[Text] All new generation domestically-produced multiple rocket launcher systems have been developed at Tula's "Splav" State Scientific-Production Enterprise. After five years of testing and development the currently widely known "Grad" launcher began to enter into the troops in 1963. "Uragan" MLRS appeared in 1975 and "Smerch" has been in series production since 1987. And if systems that are similar and close to "Grad" have been reproduced in a number of variations abroad, a launcher that is related to "Uragan" was only created by U.S. designers in 1981. This aggressively advertised multiple rocket launcher system that many people are actually interested in was adopted as the standard in NATO. As for the "Smerch" 300-mm multiple rocket launcher, there still isn't anything like it in the world.

The 9P140 "Uragan" 220-mm multiple rocket launcher system has been mounted on a ZIL-135LM eight-wheeled chassis. Observant readers could point out that the "Luna-M" tactical rocket launcher system has the same drive train.

"Uragan" is designed for the destruction of enemy personnel and unarmored vehicles and also remote minelaying in the tactical depth. The weight of the "Uragan" system's unguided rocket projectile (rocket) is 280 kg. The weight of the warhead that can be high-explosive fragmentation, cluster bomb (fragmentation, remote minelaying), or incendiary with a bulk detonating mixture—is 90 kg. The rocket's 9M27K cluster bomb warhead is armed with 30 fragmentation submunitions or 24 antitank, or 312 antipersonnel mines.

Under a full salvo, which requires 20 seconds, one launcher covers an area of 426,000 square meters, that is, more than 42 hectares.

Besides a combat vehicle, a transporter-loader vehicle on the same chassis is part of the "Uragan" system. It carries 16 rockets and is equipped with a crane with a capacity of up to 300 kilograms.

"Uragan", like the other multiple rocket launchers, is an awesome and effective weapon. If howitzers and cannons conduct continuous, accurate and selective fire against small targets, rocket systems permit us to inflict a surprise and massive fire strike against the most important area targets—concentrations of enemy personnel and equipment. In combination, while supplementing each other, they are the make-up of modern artillery.

Primary Tactical-Technical Specifications of the "Uragan" multiple rocket launcher

Caliber, in millimeters	220
Weight of the loaded combat vehicle, in tonnes	20
Number of launch tubes	16
Firing range, in kilometers	
—Maximum	35
—Minimum	9
Total weight of the transporter-loader vehicle, in tonnes	20
Number of projectiles carried	16
Speed of movement, in kilometers per hour	up to 85

CIS: AIR, AIR DEFENSE FORCES

Basic Specs of 4 SU-27 Models

93UM0602D Moscow KRYLYA RODINY in Russian
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[Article by Mikhail Levin, under the rubric: "MosAir-Show-92": "The Magnificent Seven"]

[Text] The OKB [experimental design bureau] imeni P.O. Sukhoy demonstrated the SU-27K and SU-27UB aircraft that are variations of the well-known SU-27 single-seat twin-engine fighter-interceptor aircraft. The initial SU-27 aircraft and one of its latest most thorough modifications—the SU-27IB were demonstrated in flight.

The SU-27's modern aerodynamic configuration, the powerful and economical turbo bypass jet engines, the large fuel reserve, and the wide range of flight altitudes and speeds, the highly effective suite of electronic equipment, and the guided missile weaponry ensures its high effectiveness while intercepting airborne targets. Since the very beginning, the SU-27 was developed as the first native statically unstable fighter aircraft with a fly-by-wire control system (EDSU) that ensures artificial stability of the aircraft along the pitch, roll, and yaw axes.

The fly-by-wire control system is "smeared" throughout the volume of the aircraft by its channels and is extremely survivable. High thrust-to-weight ratio, the fly-by-wire control system with its automatic restriction of aircraft angles of attack and maximum G-load during flight, adaptive mechanization of the wing, a weapons

control system using optical-electronic radar and a helmet-mounted target designation system, and powerful weaponry permit the SU-27 interceptor to confidently conduct close maneuvering dog fights.

The AL-31F TRDDF [turbo bypass jet engine with afterburner] that is installed in the SU-27 and designed by the OKB imeni A.M. Lyulka—is the first bypass engine in our country that corresponds to the highest world achievements in its class according to parameters. It is operated in a wide range of flight altitudes and speeds and operates stably in modes of a deep air intake surge at Mach 2 under conditions of flat, direct, and inverted spins. The surge elimination system, automatic engine starting in flight, and *vstrechnyy zapusk* [translation unknown] starting of the main and afterburner chambers ensure the reliability of the power plant when employing onboard weaponry.

An effective REP [electronic countermeasures] suite is utilized on the aircraft. It includes the Sorbitsa-S active jamming system (its foreign twin is the AN/ALQ-135). Armament includes a built-in GSh-301 cannon (30-mm, 1,500 rounds per minute, 150 rounds) and up to 10 air-to-air guided missiles, including the R-27 medium range and R-73 short range guided missiles.

In 1986-1988, 27 world time-to-climb and horizontal flight altitude records were established in the record making variation of the SU-27 interceptor that has the designation P-42 (with the R-32 turbojet bypass engine with afterburner with a thrust of up to 13,600 kgs).

Initiation of the development of the aircraft dates from 1969 and the first flight of the experimental T-10-1 occurred on 20 May 1977. The SU-27 has been in the Air Force inventory since 1984.

In 1991, as a result of budget restrictions, the Air Force decided not to scatter resources on combat aircraft, thus preventing the further development of many types of aircraft with identical missions and, having terminated the purchase of the MIG-29, developed the SU-27 as the base aircraft to make a reconnaissance aircraft, fighter-bomber, jammer, all-weather interceptor, etc., based upon it.

Twenty four SU-27 aircraft have been sold to China based upon a contract valued at \$1.5 billion with the price of one equipped aircraft of \$35 million (this is the first delivery of Russian weapons to China in the last 30 years). Transfer of the aircraft began in August 1992. It was envisioned that Russian pilots would carry out the retraining of 200 Chinese pilots, however the Chinese have refused these services. They explained that they have their own instructors who underwent flight training in the SU-27 at one of our country's aircraft schools.

The SU-27 has been series produced at Komsomolsk-na-Amur since 1982, and the SU-27UB—in Irkutsk since 1986.

A coherent pulse-Doppler jam-proofed radar that has the capability of searching and tracking targets in the background of the earth (it supports tracking in the pass

through and the simultaneous launch of guided missiles against two targets) has been installed in the SU-27. The 36Sh optical-radar system that was developed at "Geofizika" NPO [Scientific Production Association] and that operates jointly with the helmet-mounted target designation system was demonstrated at the exhibition and augments the radar. The system is designed to determine the coordinates of contrasting thermal moving targets and has the following technical specifications:

Field of search, in degrees	120 X 75
Field of view, in degrees	60 X 10
	20 X 5
	3 X 3
Detection range, in kilometers	
in the rear hemisphere	50
in the forward hemisphere	15
Range measurement range, in kilometers	0.3-3
Coordinate measurement accuracy	
Angles, in angular minutes	5
Range, in kilometers	10
Automated tracking angular velocity, in degrees per second	more than 25

The SU-27B is a two-seater combat trainer fighter aircraft. It is designed to retrain pilots into the SU-27. It retains all of its combat capabilities (the weapons and weapons control system) and provides an outstanding field of view from both cockpits.

The crew seats are located in tandem in the two-seat cockpit.

In 1988, the SU-27PU modification that is equipped with an inflight refueling system completed a 13,440 kilometer flight, Moscow—Komsomolsk-na-Amur—Moscow, without landing and with four aerial refuelings.

The SU-27IB is a two-seater fighter-bomber with seating located side-by-side. It is designed to destroy strongly defended point targets under any weather conditions, during the day or at night. It is capable of completing a flight in the terrain following mode.

They propose replacing the first variations of the SU-24 aircraft with SU-27IB aircraft.

The aircraft has an integral aerodynamic layout and is manufactured according to the "triplane" design with PGO [translation unknown]. It also differs by the use of a two-wheel nose gear and reinforced main landing gear. It has no under fuselage stabilizers. The cockpit is an armored capsule with the employment of a titanium alloy and armored glass. Entry is through the hatch in the lower section of the forward landing gear. The cockpit is equipped with multi-function displays on ELT [cathode ray tubes]. The seats have ergonomic improvements.

The aircraft can be armed to suppress enemy defenses with Kh-31 antiradar missiles on hard points under the engine air intakes, with 500 kg bombs with laser guidance on external underwing pylons, with Kh-29T air-to-surface missiles with television guidance and with Kh-29L air-to-surface missiles with laser guidance on the center underwing pylons, with R-77 (RVV-AE) medium range air-to-air missiles on the external underwing pylons and with R-73 close air combat guided missiles with IR guidance on the wingtips. KAB-1500 and KAB-500 bombs can be installed (the bombs have laser and television guidance). Guidance of the Kh-29 guided missiles can be carried out using the helmet-mounted system. The GSh-301 30-mm cannon has been retained in the right nose fuselage extension and a retractable aerial refueling probe has been mounted in the left nose fuselage extension.

The nose cone has a flattened shape with developed side extensions and tapered edges. On the experimental aircraft that was demonstrated, it is metallic and there are no sensors in it. They propose installing a radar with a small antenna.

The SU-27K is a carrier-based aircraft. It is designed for defense of Naval ships from enemy airborne offensive weapons systems.

Work on the development of the SU-27K began in 1977. The first flight took place in August 1987. In November 1990, the SU-27K carried out an aircraft landing on the deck of the Admiral of the Fleet of the Soviet Union Kuznetsov heavy aircraft-carrying cruiser for the first time in the USSR and took off from the deck of the ship using the ski-jump. They proposed demonstrating the SU-27K in the West for the first time at the 1992 Berlin Aerospace Show. They planned completion of state tests in July 1992. The decision has been made for series production.

The SU-27K, like the SU-27IB, is manufactured according to the "triplane" design with PGO and with significantly expanded maneuvering capabilities of the aircraft. The fighter has been equipped with a folding wing and stabilizer. An automatic wing leading edge adjustment mechanism permits it to carry out flights along a polar envelope. The developed mechanization of the trailing edge increases lift during landing 1.5 times and substantially reduces landing speed.

The chair in the cockpit has an increased incline angle. The flight control and navigation system provides an automatic pilot until the ship's deck is encountered. A retractable inflight refueling system probe is located to the left along the side ahead of the cockpit. The optical-electronic radar is located to the right if you are looking from the cockpit (on the initial SU-27, it has a central position). The aircraft is equipped with a multichannel communications suite and with a developed electronic countermeasures system.

Besides the built-in GSh-301 30-mm cannon, "Moskit" long-range supersonic antiship guided missiles (located

on an under-fuselage hard point on a special frame) and up to 10 air-to-air missiles are in the SU-27K's inventory.

The flight-research institute demonstrated a flying laboratory on a hardstand that was developed based on the SU-27 aircraft to study active flying safety support systems of future maneuverable aircraft and the optimal control of their trajectory movement. The flying laboratory is being used in the LMK-2405 flying modular complex. It also includes a ground test-adjustment stand.

The flying laboratory has been equipped with a comprehensive control system. It combines experimental aircraft and engine control system, an information depiction system and command and control elements. An omnidirectional information exchange system is utilized for communications with the ground.

The flight test control system supports development of external trajectory measurements, radio-telemetry information, and also modeling and formation of the laws of control using a ground stand.

The "russkiye vityazi" [Russian warriors] piloting team—six SU-27's—are successfully performing here in our country and abroad. Test-Pilot A. Kvochur recently organized a new team. There are four SU-27's in it (two single-seaters and two two-seaters with an aerial refueling system). The aircraft are painted using Western-manufactured paints. The aircraft were purchased from the plant (the single-seaters at Komsomolsk-na-Amur, and the two-seaters at Irkutsk) for a price of 50 million rubles per aircraft. "Yupiter" Private Insurance Company provided the resources for the acquisition. One of the tasks of the new piloting team is advertising LII to expand the business activity of its specialists abroad.

Comparative Specifications of Variations of the SU-27 Aircraft

Designation	SU-27	SU-27IB	SU-27K	SU-27UB
Mission	Interceptor	Fighter-bomber	Carrier-based fighter	Combat-training aircraft
Year of first flight	1977	1990	1987	1985
Year accepted into the inventory	1984			
Dimensions				
Wing span, in meters	14.7	not provided	14.7	14.7
Aircraft length, in meters	21.935	not provided	21.935	21.935
Aircraft height, in meters	5.932	not provided	5.932	6.357
Wing area, in m ²	62	not provided	62	62
Sweep, p/k [translation unknown], in degrees	42	42	42	42
Crew	1	not provided	1	2
Engines				
Number and Brand	2 AL-31F	2 AL-35F	2 AL-31F	2 AL-31F
Thrust, in kgs with afterburner	2 X 12,500		2 X 12,500	2 X 12,500
Without afterburner	2 X 7,600		2 X 7,600	2 X 7,600
Weight and payload, in kg				
Takeoff weight				
Maximum	30,000	44,360	32,000	30,500
Normal	22,500	not provided	not provided	24,000
Empty aircraft	16,000	not provided	not provided	17,500
Maximum combat payload	6,000	8,000	6,500	not provided
Internal fuel	9,400	not provided	not provided	not provided
Flight data				
Maximum speed, in kilometers per hour				
At high altitude	2,500	not provided	2,300	2,125
Near the Earth	1,400	not provided	not provided	not provided
Maximum Mach Speed	2.35	not provided	2.17	2.0
Service ceiling, in meters	18,500	not provided	17,000	17,250

Comparative Specifications of Variations of the SU-27 Aircraft (Continued)

Maximum range, in kilometers	3,900	4,000	3,000	3,000
Length of takeoff run, in meters	650	not provided	not provided	750-800
Landing speed, in kilometers per hour	not provided	not provided	240	not provided
Length of landing run, in meters	620	not provided	not provided	650-700
Maximum operational G-load	9	not provided	8	9

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History, Prospects for Military Use of Lighter-than-Air Craft*93UM0627A Moscow KRASNAYA ZVEZDA in Russian 19 June 93 p 6*

[Article by Nikolay Poroskov, KRASNAYA ZVEZDA correspondent: "Military Lighter-than-Air Aeronautics: Anachronism or Prospects?"]

[Text] In February 1987, a supernova explosion was observed from Earth, which subsequently was called "Supernova-87." It turned out that the Americans did not have a sufficient number of satellites "on hand" to gather data on the rare phenomenon, and the Space Shuttle was working on another program. NASA decided to use...balloons. In particular, balloons with an instrument focused for catching gamma rays. Dozens of these flights were made. The Pentagon, in turn, began active use of lighter-than-air craft, including for the purpose of advanced experiments under the SDI [Strategic Defense Initiative] Program.

Thus, in the most modern research, study of outer space, they used archaic balloons, as they are sometimes called in the West. But are they archaic? The entire history of military lighter-than-air aeronautics (the discussion will be primarily about them) and the splash of interest in balloons and dirigibles in recent years in the West indicated that it is too early to write them off the army accounts.

From the Montgolfiers to the Present

The beginning of the era of lighter-than-air aeronautics is officially considered 5 June 1783, when the Montgolfier brothers lifted their balloon filled with hot smoke into the air. Already in 1849, the Austrian troops bombed Venetia with incendiary and explosive projectiles from small balloons. In 1870, the first Russian military tethered balloon was built, and testing began to determine the possibility of using it in the army. The date of the first balloon launch is 1 August 1870 before the revolution was considered the birthday of Russian military lighter-than-air aeronautics.

The year 1875 was marked by the creation of the first special military unit—the Regular Lighter-than-Air

Command. At that time it participated in the combined-arms maneuvers near Tsarskoye Selo. Six years later, the first graduation of officer-balloonists was held. They gained combat experience during the Russo-Japanese War. On 12 July 1904, a reconnaissance balloon was launched for the first time in frontline conditions. The first military dirigible, the "Krechet," with machineguns in the gondola was tested in 1910.

By the start of World War I, Russia had 14 lighter-than-air companies, and already by 1917 it had 87 separate army and corps lighter-than-air detachments, two naval fortress-garrison lighter-than-air companies, and their supporting battalions and parks. In frontline lighter-than-air units there were more than 700 officers and 28,000 soldiers. Tethered balloons together with river craft and armored trains were actively used in fortified areas in the Civil War—for reconnaissance, artillery fire adjustment, and they even engaged airplanes in combat.

With the start of the Great Patriotic War, lighter-than-air observation balloon battalions were formed. They began to be used for the first time in mobile forms of combat: following artillery combat formations, they reconnoitered new targets and intermediate lines of the enemy defense. It is widely known that barrage balloons were used for air defense of cities and strategically important installations. Fire against the Reichstag was adjusted with the aid of a balloon.

At the beginning of military operations, German submarines were in total control of the Atlantic. In 1942 alone they sunk 454 vessels. The use of dirigibles armed with machineguns, cannons, depth charges, and high-explosive bombs reduced these losses to one-seventh the next year. The German submarine fleet was ordered not to attack convoys escorted by dirigibles.

By the end of the war, the Americans had about 150 helium dirigibles that had spent a total of 560,000 hours in the air. Only one craft was lost—when attacking a submarine. Even after the war, the high reliability of lighter-than-air craft attracted operators: of the 500 dirigibles in the West, only three crashed in 25 years. In the late 1940's, the USSR had the V-12, "Pobeda," and "Patriot" dirigibles, used at sea for aerial surveying of minefields, individual mines, and sunken craft. In February 1960, the U.S. Navy conducted exercises in the North Atlantic to ascertain the possibility of continuous patrolling in this area.

After 1968, the Goodyear Company (USA) began manufacturing third-generation dirigibles with a volume of 5740 cubic meters, and 4 years later was joined by West German companies. The fundamentally new British AD-500 and SK-500, performing functions of maritime patrolling and antimissile defense in addition to the known functions, gained recognition at the Farnborough and Le Bourget air shows in 1982-1984.

The lighter-than-air craft proved themselves pretty well in local wars. In Vietnam, a system for detecting low-flying aircraft using captive balloons of the STARS and LASS series operated actively. From an altitude of 750 meters, having a Italian-made Radit radar, one balloon took care of a zone with a radius of 110 km and detected targets down to an individual person at up to 20 km, an automobile at up to 30 km, and a helicopter at up to 38 km. Balloons and acoustical equipment were raised to monitor the jungles.

The events in the Persian Gulf showed that it is considerably more complex to preserve the potential of strategic forces without using lighter-than-air craft. During those days, Iraq captured from Kuwait a system of LASS balloons and used it to detect low-flying aircraft and cruise missiles at a distance of up to 260 km. U.S. psychological operations subunits dropped propaganda leaflets from balloons and installed repeaters on them to conduct special propaganda. The U.S. Department of Defense report to Congress for 1990 states: When guarding the border, the AWACS aircraft are insufficient; they are effective only in combination with captive and automatic drifting balloons.

Invasion of the Aerial Strangers

Automatic drifting balloons (ADB) were launched most intensively against the territory of the USSR from 1956 to 1977. During these 20 years, according to data of Colonel Oleg Korol, candidate of military sciences, subunits of the Air Defense Radar Troops detected 4112 balloons, and fighter aviation shot down 793. The balloons belonged to the United States, France, Finland, the FRG, Norway, Sweden, and Turkey. The owners of some have not been established. During this period, the United States launched an average of 600 balloons a year, of which 300 belonged to the Navy, 150 to the Air Force, and the rest to civilian research organizations.

Here are the most frequently encountered routes: Narvik (Norway)—Petrozavodsk, Vologda, Perm; Hamburg—Berlin, Warsaw, Minsk, Moscow; Livorno (Italy)—Sofia, Sukhumi, Baku, Krasnovodsk; Erzurum (Turkey)—Baku, Ashkhabad, Mary, Dushanbe. The ADBs have flown as far as Siberia and Semipalatinsk, and some have gone into Mongolia. According to the observations of pilots launched to intercept the strangers, the balloons are ball-shaped, teardrop-shaped, or egg-shaped, and the color of the gasbag is bright opaque with a silvery or dull-gray hue. Some are mirror-like, pale blue, and transparent like a soap bubble. Every ADB has a suspension: sometimes a tether whose length is 3-4 times the diameter of the ball, or bell-shaped with several petals, or

several individual objects of a geometric shape, or a string of cylindrical and corner reflectors.

One can judge the effectiveness of the operation of aviation by one of the most typical periods—from 11 August to 14 September 1975. At that time 11 foreign ADBs penetrated the country's territory at a drift altitude of 11-14 km and a speed of up to 200 km/hr. From 1 to 16 MIG-21, Yak-28P, Tu-128, MIG-19, and Su-15TM interceptors were launched against each intruder. The interceptors used guided missiles, rockets, and cannons against them. The results of the attacks were eight ADBs shot down, two had their suspension broken off, and one was not shot down. The average expenditure for one damaged craft was 1.4 missiles, 26 rockets, and 112 cannon rounds. The ADBs proved to be a strong nut.

What is the reason for the low success rate? Above all, it is the short range of detection and lock-on of onboard radar and missile homing heads—due to the small scattering cross section of the ADB. Add to that the mistakes in vectoring the interceptors: a command post sometimes vectored them against the ADB into the sun, which could cause the lack of a lock-on by the thermal homing head. As a result, some of the ADBs penetrated up to 2000 km deep into the USSR without pressure from air defense.

In most cases, in the area where the shutdown ADBs fell, either remnants of the gasbag or parts of the suspended equipment were found. They also found containers with electronic surveillance equipment and antennas. It must be taken into account that the contents of the suspension could have been dropped before crossing the border. The remnants were found by search teams, school students, and kolkhoz farmers. Pilots of small aircraft discovered them in the most varied corners of the country. Major N. Savateyev shot down an ADB on 17 July 1985 in the vicinity of the Laptev Sea. Presumably, the balloon was launched from the range at Kiruna (Sweden) or Bodo (Norway) and followed the route Greenland—Baffin Island—Northern Canada—Alaska (Barrow), where the equipment containers were probably dropped. Return of the ADB to the launching point was quite realistic.

According to existing statistics, 39 percent of the balloons flew into our country from the southwest, 36 percent from the west, 22 percent from the northwest, and only 3 percent from the east. This is explained by the direction of the jet streams and the stability of the streams in time. A balloon flew from the Western Europe to the USSR border in an average of 37 hours and to the eastern areas in 2-6 days in the winter and 4-8 days in the summer. Such a balloon launched from North America appeared at our borders in 2-5 days. To protect against air defense weapons, the gasbag and the suspension were separated vertically, a corner reflector was hung a considerable distance from the gondola, and they tried to cross an air defense zone at night. The survivability of lighter-than-air craft is fairly high. For dirigibles it is comparable to the B-52. They are able to withstand the effects of an air-to-air missile and fighter cannons and cost half as much as, say, a Boeing 747.

We will note that ADBs can be used not only as reconnaissance but also as combat craft. A balloon with a 500-kg payload of VX toxic agent in Big Eye type bombs can contaminate an area of more than one square kilometer. Therefore, after such splashes of activity by lighter-than-air craft as the launching of nearly 3000 balloons in January-February 1956 and hundreds of small balloons in December 1980-January 1981, which KRASNAYA ZVEZDA wrote about on 11 December 1991, the question of producing effective countermeasures arose sharply.

Above all, it required an interceptor having a radar with a long range of detection and also a free-swinging gun mount for firing against a target at close range. Work was also conducted to create an aircraft capable of working against ADBs at night. It was planned to refit some of the air defense fighters with a long-focus recorder for objective estimation of the size of the gasbag and the composition of its suspension. The decision was also made to make all the new radars taking into account the possibility of operating against ADBs and small balloons.

Some S-75 and S-125 surface-to-air missile systems were upgraded to work against balloons. There was also talk about the need to create a balloon air intercept system. Alas, much of what was thought up remained in the planning stage primarily due to the lack of financing and in connection with the conversion process.

Balloons Can Do Everything

The reduction in spending for development and procurement of arms dictates the need to search for non-traditional methods and means of conducting combat operations. Inexpensive, unmanned, ecological lighter-than-air craft are able to perform a great number of tasks effectively. These include electronic, photo, and television reconnaissance, jamming enemy radar, relaying communications and command and control signals, and dropping propaganda literature in the rear area of the opposing side. Lighter-than-air craft can play the role of decoy air targets and be used (with a massive launch) to overload enemy information networks, exhaust and demoralize the enemy, complicate the air situation, and even destroy area targets.

Lighter-than-air craft are quite suitable for transporting cargo from the rear area to a theater of military operations [TVD]. In this case, Military Transport Aviation [VTA] would gain a large capability for carrying out its main missions: drop-zone delivery and also movements within a TVD. When parts of airfields are knocked out of commission, dirigibles would become the sole means of evacuating heavy equipment—those same aircraft.

The feasibility of using balloons is also the result of the increase in the role of electronic warfare in modern warfare. High-altitude multipurpose balloon platforms [VAMP], which have been developed in the West in recent years, like dirigibles, can be used to create multifunctional weapons, including interspecific employment. This means installing on them weapons that home in

according to typical signatures of targets—thermal radiation, radar emission, and so forth.

The capabilities of airborne command and control posts and long-range radar detection and guidance equipment on aircraft are limited by the time they are on patrol in the air and by the size of the antennas. Unlike them, balloons and dirigibles can carry antennas of virtually any size.

Let us note that lighter-than-air craft have a dual purpose and, if necessary, can easily blend into the conversion process. Being 4-5 times more economical than aircraft and 18-20 times more than helicopters, they can transport cargo to remote areas of Siberia and the Far North for modular construction, perform installation and crane operations, and haul out timber and minerals. Losses from unrealized opportunities come to billions of rubles each year. I think such statistics in the military area would give similar figures.

Let us take just the developing of new basing areas. In the Strategic Missile Troops, lighter-than-air craft can transport and install (and today even dismantle) structural elements of missile silos and the missiles themselves, protect position areas of missile groupings against attack by tactical aviation, cruise missiles, or landing force—with the aid of a captive balloon obstacle system. Experience of local wars confirmed its effectiveness. For example, it affects the morale of pilots: the fear of colliding with a balloon or cable forces them to fly at high altitude or go around the obstacle... In the Missile Troops, it is often required to illuminate a number of operations—preparation of positions, dismantling, and recovery. Here small-capacity balloons with floodlights in the suspension are simply indispensable.

Small-capacity balloons also find use in chemical defense units. Imagine: the enemy has used biological weapons—he has dropped containers with infected insects. At night they fly to the brightly illuminated gasbag of the balloon and die from the toxic substance impregnated in it or from an electrical current passed over the material. Balloons may be used to hoist containers with a decontaminating solution and spread it over vast areas of the terrain, create aerosol clouds and smoke screens, drop carbon-containing mixtures in the ozone layer above the areas affected...

In the Navy, functions of balloons may be search and destruction of submarines, reconnaissance and laying of minefields and surface decoy targets, and much else.

With the reduction in missiles, the volume of combat missions for aviation increases. Hence the critical need to neutralize command and control of the enemy air defense system. One method is to break through it with lighter-than-air squadrons conducting electronic suppression of command and control assets, firing on them, launching dummy targets and traps, and misinformation in communication lines. The advantage of such squadrons is obvious. The altitude (up to 35 km) and the small scattering cross section make it considerably difficult to detect the craft. As the length of the radar wave

increases, the radio permittivity of the gasbag increases. The ratio of losses of ADBs when penetrating an air defense zone is from 0.6 to 0.2; it decreases sharply as the number of balloons in the air increases. Add here the long duration of being over enemy territory (up to 13 days) and the long flight range (up to 13,000 km).

Captive balloons will create a solid field of jamming signals; situated near the installation or target along the front line, automatic balloons use passive jamming to provide cover for combat formations of strategic aviation. When necessary, they scatter small expendable jammers. When ADBs fly over enemy combat formations, tracking them is made difficult due to the dropping of chaff—the survivability of the balloons increases. One lighter-than-air squadron can launch up to 10,000 dummy targets in a day (for example, simulating a ship or submarine—in combination with corner reflectors).

One of the objectives of a massive launch of balloons may be a strike against enemy reserves. This involves disrupting the enemy and his maneuver, breaking up the commitment of fresh forces, and losses in manpower and equipment from dropped mine and incendiary cluster bomb units with aerial bombs. Add to that the use of fire to destroy agricultural crops and forests and the launching of "air-to-radar" missiles. Calculations show that this requires roughly the same number of balloons and air-craft, but the losses of the latter are higher.

The capabilities of balloons and the sphere of their employment are expanding considerably with the use of previously mentioned VAMP with a variety of equipment. Interacting with satellites, they can be used in a missile attack early warning system, for detecting ballistic missile warheads and other objects in the near-earth space, signal relay, navigation, and monitoring strategic arms reductions.

Both we and the Americans have quite a few problems with over-the-horizon radar. Balloons and dirigibles could partially replace such radars, conducting reconnaissance of hard-to-access areas of one's own territory and neutral waters. Patrolling of border and coastal areas using lighter-than-air craft is a big help to border guards. It is a big help to seamen in escorting ships and mine-sweeping. The capability of radar operators expands considerably if they were to be given airborne early-warning systems based on a captive balloon or piloted dirigible.

Electromagnetic, x-ray, and gamma radiation equipment and sensors, infrared telescopes, and spectrometers raised on VAMPs will be able to detect ballistic missile launches and cruise missile flights. If you look at it more broadly, equipment on VAMPs can be used to create a solid radar field along the border on the most threatened axes in difficult-to-reach areas. In particular, along the northern borders of the country it would require only about 20 platforms. Their use in a tactical command and control system for strategic nuclear forces combined with a back-up space communications system is also quite realistic.

The list of spheres for using lighter-than-air craft could go on, but it is apparently already clear that lighter-than-air craft are not an anachronism, but quite modern equipment needed by the army.

NASA and the Pentagon Love Balloons

In the second half of the 1950's, there was an accumulation of experience in building and operating lighter-than-air craft abroad. The United States, England, the FRG, and Japan have projects for dirigibles and so called lighter-than-air hybrid craft. Some of them have already been implemented. The level of development of lighter-than-air aeronautics makes it possible today to have craft with such a range of characteristics: flight altitude—up to 35 km; flight range—over 12,000 km; flight duration—up to 13 days; payload—over 2 tons; and flight speed—up to 100-120 km/hr. They can be used on all strategic axes and operate where other airborne vehicles are less effective. A controlled flight is concluded by fairly precise leading out onto the target. We will also note the possibility of year-round use of the craft, the considerably less g-loads on equipment during launch, the quite high level of flight safety in the event of a malfunction of a dirigible's engine, and moderate requirements on equipping launch and technical launch positions, which makes operation easier.

Experts in the West today are working on methods of ballasting the craft (for example, how to make them heavier after dropping the cargo), ensuring stability and control when hovering and safety of parking captive balloons in any climatic zone.

NASA plans to have about 70 research balloons with a flight altitude of up to 40 km in order to partially replace sounding rockets and spacecraft. Plans also include small-capacity film captive balloons for rescuing crews of air-craft that have crashed and captive mobile balloons on automatic devices for raising communications equipment. The North American Aerospace Defense Command (NORAD) also plans to use radar balloons.

Experts in the West believe that balloon systems are the most effective means against cruise missiles, where sometimes ground-based radars are helpless. The British company Rompart proposed for this purpose an entire system with a radio-controlled center and command post.

In the United States, the companies RCA and TCOM are working for the armed forces. The balloon complexes at Cuijo Key (Florida) and on Cape Canaveral are equipped with their products. Their main purpose is early detection of low-flying targets with a small radar cross section (RCS) and maritime vessels violating the border. There is a "Beta" test range on the island of Grand Bahama. To date, more than 40 systems have been built. The information received goes to a regional operational control center at Tyndall AFB (Florida), and the production capacities are concentrated in the city of Melbourne (Florida).

The company STARS has created small captive balloon systems with mobile basing. They have participated in several programs. Polar Star, for example, studied the effect of winter weather conditions on the operation of balloons. As a result, they developed new methods of washing off the snow or ice cover from the surface of the gasbag by using a heated solution of ethylene glycol or removing it using an electric vibrator. It has been established that it is possible to use balloon radar systems in arctic areas.

As a result of the TAAR program, it has called for the development of a system platform for long-wave antennas for communications with submerged submarines following a nuclear strike. A Kevlar (Kevlar is stronger than steel alloys) tether cable with a metal braid is to fill the role of the antenna. The main requirement for the system—deployment from unprepared areas within 5 hours—has been met. Optic fibers are used to relay telemetry to the ground observation post; a power cable run in the tether cable is used to supply power to the onboard equipment. It is possible to use an autonomous onboard gas-electric unit. The cable provides protection against lightning and static electricity.

It is planned to install on the STARS system an electrooptical observation system used for Aquila RPVs [remotely piloted vehicles] made by Lockheed, and also equipment for intercepting radio communications in the VHF and UHF bands.

One of the latest developments is the Super STARS system with a 282-kg payload. It has a Westinghouse radar (the F-16 fighter is equipped with a similar radar). In all, three of these systems are being used: on an auxiliary ship in the vicinity of the Panama Canal, in South Korea, and by the U.S. Army command.

In exploration space and the atmosphere, the military is attracted considerably by the less time needed for launch preparation and the economic advantages. The cost of an experiment on the Shuttle runs \$5-10 million, about \$0.5 million on Nike-Ajax or Black Brant sounding rockets, and a balloon flight costs about \$100,000.

The balloon research program of the U.S. Department of Defense is supervised at a laboratory at an Air Force base in Huntsville; the NASA Center has a position of balloon projects supervisor. A permanent launch complex is located at Holloman AFB; launches to altitudes of 40 km are accomplished by the military from 13 ranges and 7 launch sites on the territory of the United States and abroad. There are five types of balloons in service that can raise a payload of up to 2.5 tonnes. But the payload may also be increased with the appearance of new materials for the gasbag that make it possible to decrease the ballast weight. Goodyear has developed a super-strong fabric based on aramide [transliterated] fibers; it is impervious to ultraviolet radiation, gas-proof, and light.

Production of "balloons" is also financed by the governments of France, India, and Japan. Today there exist

overseas projects for a strike complex based on a strategic balloon platform and also a complex of reconnaissance-strike systems based on unmanned dirigibles being designed with a flight duration of up to 150 days and a payload of up to 120 tonnes.

Fairly often we have followed the West, "catching up" with it in new developments. Will we have to do this again?

Into Whose Sails Does the "Solar Wind" Blow

After the West began actively using balloons, we also created a corresponding service in our Air Force in 1956. It was followed by the appearance of a lighter-than-air aeronautics scientific research center and a special separate design bureau. The lighter-than-air aeronautics service during those years participated in organizing and conducting operations "Grom" and "Groza"—it created a layout of training targets during testing of nuclear warheads and helped to study the passing of radiowaves during nuclear detonations. Branch centers were created in the Transbaykal Military District in Mongolia.

In the early 1970's, the design bureau began developing a intercontinental stratospheric balloon system for an Air Force order. During those years, the manufacturing of pneumatic structures for military purposes began—inflatable hangars for performing various work on military equipment. In addition, balloonists have created inflatable mock-ups of foreign military equipment—missiles, aircraft—for test practice training of flight personnel.

Specialists of the service and the lighter-than-air aeronautics center were also involved in such measures raising a captive balloon with a huge portrait of Lenin on Red Square, and at the Olympiad in Moscow they raised trapeze with gymnasts at Luzhniki. A captive balloon with powerful lighting equipment was used at the Chernobyl Nuclear Power Plant to support remote control of a crane.

What are lighter-than-air units today? After the breakup of the USSR, one squadron went to Ukraine. The personnel of the units during peacetime comprise only a small part of the full strength. Lighter-than-air units are intended mainly for use during wartime. Today, the main mission of the flights and detachments is combat training and maintaining the mobilization reserve in readiness. Training and experimental launches and participation in exercises being conducted are regular. The service has a balloon flight monitoring group, and tracking posts are scattered throughout the country.

The chief of the Lighter-than-Air Aeronautics Service of the Air Force, Col Nikolay Prokhorov, is simultaneously, on a voluntary basis, the vice president of the Moscow Federation of Lighter-than-Air Aeronautics, which, aside from other things, certifies air balloons of amateur balloonists and gives them flight clearance.

The service performs the functions of the general buyer of lighter-than-air craft, but lately this role has decreased considerably—appropriations being allocated have dropped sharply. Prokhorov also cited other, less critical

problems. These include the need to resolve legal issues about the possibility of crossing balloon flight routes in the airspace of nearby foreign states and the difficulties with training specialists.

In short, the Lighter-than-Air Aeronautics Service today has less weight and status than it should, considering the increased interest in the world in ballooning. Let us take that same economic aspect. Certain foreign academies of sciences are requesting to be granted the opportunity to fly balloons being tested over the territory of Russia—scientists are attracted by the longest flight route in the world. Moreover, we have the only forecasting center that develops possible flight routes of automatic drifting balloons. Let us also recall the network of tracking posts. But the capabilities of the service and the test center do not make it possible to respond to all the requests and thereby earn hard currency for Russia's Ministry of Defense.

In 1988, after the unsuccessful launch of a balloon that later went into Sweden, then-Minister of Defense D. Yazov ordered the word "scientific" removed from the name of the scientific research center. Both the staff and, consequently, the capabilities were reduced.

Meanwhile, the use of lighter-than-air craft corresponds to the defense orientation of our military doctrine and conforms to the principles of reforming the armed forces. Here is just one example: Airborne command posts on balloons accomplish the task of building a command and control system according to the principle of "axis," and not "front-army-division." In the opinion of experts, our armed forces need, in particular, dirigibles with a payload of at least 30 tonnes and a flight range of 10,000 km. It needs balloons of various capacities and purposes.

There is a proposal to use a dynamic lift system in addition to a static system (to equip a dirigible with planes and give it the shape of a wing), to use a propeller like a helicopter (helistat), and to use the force of heated air (thermoplane). These ideas have been partially implemented. The disputes between supporters and opponents of lighter-than-air craft do not subside; meanwhile, overseas they continue development and designing of various types of lighter-than-air craft.

What about us? The design bureau near Moscow, the only developer in Russia and today the producer of military lighter-than-air craft, has the same problems as the entire defense sector—no financing, personnel are leaving, and specialized enterprises that are suppliers are changing their production specialization. Instead of unique film for the gasbags, they "turn out" regular polyethylene. The picture is the same with ballast iron shot. The production of flight control equipment for balloons is quietly being curtailed. The increase in prices is also appreciable here. One cubic meter of helium costs 1,000 rubles. More than 20 related enterprises have ended up in nearby foreign countries...

But production goes on. Aleskey Yegorov, deputy chief designer, explained that it was partially due to this same

conversion re-specialization: they manufacture hot-air balloons for commercial firms for sports and advertising. Similar balloons would also be suitable for the military for training parachutists. But there are no orders.

The capabilities of the enterprise and its scientific potential make it possible to do much for the army. In the future this includes participating in developing space systems, creating balloon equipment for communicating with submarines and surface ships, a mobile captive balloon complex for the Ground Forces, manufacturing radars on a captive balloon or dirigible for air defense, and many else. It is as if nature has set aside a "niche" specially for balloons—from the altitude ceiling for aircraft (20-25 km) to the orbits of spacecraft. No one occupies this echelon, and it is at altitudes from 20 to 50 km that tremendous opportunities are opening up for lighter-than-air craft. True, it must be taken into account that the volume of the gasbag doubles in the stratosphere every 4 km. It is only a matter of new film for the gasbag.

In conclusion, a few exotic things. As they said, the design bureau is able to develop for spacecraft a special sail that uses the energy of the "solar wind." Unfortunately, the wind is not blowing into our sails today.

CIS: NAVAL FORCES

Priorities in Russian Naval Policy

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pp 3-8

[Article by Lt-Col D. Trenin, candidate of technical sciences, and Captain-Lieutenant M. Shepovalenko]

[Text] It must be noted in the current discussion of Russia's necessary and sufficient defense that less attention is being devoted to it in the Navy than in the other armed services. There are a number of reasons for this. First, there have always been elements in Russia, which is a great continental power, who have believed the Navy to be the "junior" armed service, performing auxiliary functions in its defense system. Second, a stereotype recently evolved in the public consciousness according to which the Navy is an instrument of transoceanic expansion, and an expensive and not very effective one at that (see the development of the subject of aircraft carriers in the Soviet press from the late period of perestroika). Third, our integral maritime border decreased significantly in length with the disintegration of the Soviet Union. In this case Russia has possession of only an insignificant part of the Baltic, around a fourth of the Black Sea and only the northwestern "corner" of the Caspian Sea.

Let's begin with the last circumstance. Russia now finds itself pushed to the northeastern periphery of the European continent as a result of changes that had occurred, and which have probably not yet reached their conclusion. Its access to western, southwestern and southern seas is becoming increasingly more difficult. Under these new conditions we would think that we could expect the

country to assume a dramatically greater continental orientation. However, the same conditions now allow Russia to focus primarily upon itself. And it is clearly evident here that from the standpoint of development of existing potential, besides the historical northeastern lands of Ancient Russia the most promising regions of the country are the North, Siberia and the Far East. However, in distinction from the country's ancient core, each of these other regions enjoys wide access to the seas, and not just to closed basins like the Baltic and the Black Sea, but to seas of the open ocean. In addition the contemporary trends of economic development reveal that all of the regions are presently striving toward greater independence, as a result of which the balance of power within the Federation will shift to their benefit. And if this is so, then their communication with the outside world will not necessarily proceed exclusively through Moscow, and Russian interests in, let us say, the Pacific Ocean will be determined to a greater degree by the needs of Siberians and Far Easterners. Consequently, paradoxical as this may sound, the new conditions suggest to Russia that it must realize its position as a maritime power to a greater extent than before.

As we know, there are 38,240 km of sea boundaries to the Russian Federation's 20,322 km of land boundaries. As we can see the ratio is 2:1 in favor of "water." It would be pertinent to recall here that the predominantly continental orientation of military development in the USSR was a consequence of its concentration chiefly upon the European theater (the epicenter of confrontation over all of the last decades). However, it seems today that the real threat has weakened from the western direction (though it is true that far from everything has been fully settled in former socialist Europe), while there are no countries in the south that possess a potential presenting a danger to us. At the same time the fires that have taken over the southern limits of Russia appear to be ready to grow together into a continuous arc of fire, while in the east, having giants as neighbors requires a fundamentally new approach to supporting our interests. Thus the new situation encourages us to reject the strategy of continuous opposition and switch to a strategy of mobile defense at all bearings.

This in turn elicits the need and possibility for Russia to take a new look at the purpose and role of its Navy. The first thing that needs to be considered is that of all the armed services, the Navy perhaps possesses the greatest universality, which allows it to extremely effectively defend and protect a wider range of national interests—both in peace and in the event of war or armed conflict.

This pertains chiefly to ensuring the country's survival by means of nuclear deterrence. As long as nuclear weapons exist, this will continue to be the central task, all the more so because the share of the sea component of our state's nuclear triad will increase following implementation of the treaty between Russia and the USA for further reductions of offensive arms (START-2).

Protection of the country's sovereignty and integrity is usually associated with the inviolability of national territory, which is ensured through the presence of sufficient and balanced armed forces. The historical experience shows that the potential enemy has often been provoked to aggression by the weakness of a victim or by some other circumstances providing him with hopes for success. And it is not the nuclear potential of Great Britain but the remoteness of the Falkland (Malvinas) Islands from the continent and the low concentration of defensive forces on it that encouraged Argentina to try to seize (or take back) the islands. However, we would like to discuss not islands, of which we do possess a large number, but rather the fact that the largest disputed portion of the Earth's surface upon which Russia and a foreign state have claims is not located on land. Moscow and Oslo have been conducting a respectful and civilized debate over part of the shelf of the Barents Sea, potentially rich in oil and gas deposits. The question as to the status of the Arctic sector we inherited from the USSR is also interesting in this connection. The boundaries of Soviet Arctic possessions were determined by a 1926 decree of the Central Executive Committee and the USSR Council of People's Commissars. All archipelagos within these boundaries are recognized as belonging to Russia, but foreign maps (in contrast to our own) do not show our state boundary to extend from Kola to Chukchi and to the very Pole. Thus problems exist, and presence (or absence) of effective naval forces can influence their solution one way or another.

Protection of sovereignty is closely associated with protection of the country's economic interests. According to some estimates over half of the oil extracted in the world will be extracted in the future from beneath the sea-bed. The Barents and Kara seas are the most promising in this respect (it would be sufficient to cite as an example just the Shtokmanovskoye deposit). If the country will not be able to protect its rights within the bounds of its exclusive economic zone, its interests will suffer enormous damage. Russia is already suffering colossal losses because its border patrol ships and boats as well as patrol aircraft are unable to fully protect our fish resources in the vicinity of the Kurils and Sakhalin from foreign poachers.

After decades of autarchy, Russia is actively integrating with the world economy. Sooner or later we will establish wide economic exchange with many countries, which will naturally lead to an increase in our economy's dependence upon foreign trade. When this happens, questions concerned with freedom of navigation and with the safety of marine lines of communication will trouble us to no lesser degree than our former enemies in the West. Moreover, while we possess a powerful ice-breaker fleet, we are still not using the Northern Sea Route—the shortest but an extremely complex water route between Europe and Japan—in the interests of international trade. If this "concealed reserve" is realized, we will also have to think about guarantees of the safety of its use.

The concept of "showing the flag" entered the political lexicon from naval practice. Oftentimes such a display conducted in certain regions is the sole means of a state's show of force in places quite far away from its national territory. In comparison with other armed services, only the Navy can be used most flexibly at any level of development of a military-political situation. Ship groupings can be increased in size and the nature of their activity could be changed in response to an increase in tension, while when tension weakens, such groupings can depart from a given region at minimum expense and chiefly without human losses. Tanks on the streets probably appear more impressive, but it is a great deal more laborious to get them there and especially to withdraw them, and in many instances this is found to be generally impossible. Moreover the flag may be shown not only by a single country but by the entire world community as a whole. Therefore, besides carrying out their direct functions of defending the country against aggression from the sea, naval forces will more likely be used more and more often in collective international actions directed at preventing conflicts and maintaining or restoring peace. The question as to Russia's contribution to such actions (and the nature of this contribution) is directly associated with the international prestige of our country.

The fleet is also capable of fulfilling humanitarian missions (evacuation of Russian citizens if necessary, such as for example in the hasty and not fully prepared action in Abkhazia) and other nonmilitary missions that may arise (for example in the struggle against illegal drug traffic).

What sort of fleet is needed for this? The Navy's organizational structure has already begun experiencing changes. MSYaS [naval nuclear forces] will remain, although the number of RPKSN [ASW ships] will decrease by more than half by the end of the decade. As far as general-purpose forces are concerned, various points of view exist, but no matter what decisions are made, Russia will be left in the future with only two large fleets. Fortunately they are precisely where the state's interests require them most insistently—in the North and the Far East. Fleets of the inland seas—Baltic and Black, which were inferior to the former in both composition and combat capabilities even in the past, will continue to exhibit this difference, and probably even deepen it. There is also no doubt that the same prospects await the Caspian Flotilla, the status of which is being reduced to the level of a base. At the same time the narrowing of the basing zones of the Baltic and Black seas fleets and the Caspian Flotilla must not result in the demilitarization of these seas, because no other states situated on their coast and in waters adjacent to these seas are exhibiting such a trend, and therefore it would not be in keeping with Russian interests.

In turn, this approach makes it possible to devote more attention under the currently difficult economic conditions to the Northern and Pacific fleets in terms of preserving and developing their military potential. An insufficiently developed infrastructure is known to be a

frustration to both of these fleets. Existing mooring space is not enough for all large ships. Many of them are compelled to stand in the roadstead, expending engine life and aging prematurely. The press recently reported the mothballing of the aircraft-carrying cruiser "Minsk," the former flagship of the Pacific Fleet, which under other conditions would still be serving for a rather long time. It is only 14 years old, after all! The same fate threatens the cruisers "Kiev" and "Admiral Gorshkov" (Northern Fleet), which have barely served half of their life, and some other ships.

Another painful problem of ours is the weakness of the repair base, especially in the Far East, because of which the combat readiness of fleet forces suffers. In the future we will probably find ourselves facing the need for developing ship building there as well. The example of Norway, which built a new building dock for the construction of a series of a new class of minesweepers, could be cited here. The Norwegians became convinced by their calculations that this would be 25 percent cheaper than refitting the old building docks or placing the orders abroad.

Of course we do not have the same capabilities today, and it will be very difficult to carry out these tasks, all the more so because the long-term plan (to the late 1990s) for salvaging a large number of warships (including nuclear-powered submarines) will require outlays amounting to 8 billion rubles,¹ and with regard to measures in fulfillment of the START treaty—R15-17 billion. Billions in outlays will also be required for the rebasing of part of the forces of the Baltic Fleet, Black Sea Fleet and Caspian Flotilla.

However, everyone, and primarily the people responsible for making the decisions as well as those appearing in the mass media, need to know that the overall losses resulting from the weakness of the infrastructure and the repair base could be up to two-thirds of the current strength of the fleet by the end of the decade, according to some estimates. On the other hand the absence of investments and, as a consequence, rejection of plans to build new ships, can for practical purposes cause the fleet to lose its real fighting capability.

The following can be singled out among the main directions of Russian ship building (on the condition that they will survive into the future after all):

- universalization of ships in terms of classes, purpose and range of missions;
- in parallel with general universalization, specialization of a number of designs and perhaps even entire classes of ships, including in particular theaters (Russia is a unique sea power: Presence of three inland maritime theaters and two open ocean theaters predetermines wide diversification in military ship building);
- reduction of the number of ships within a single class to one or two types, and as a consequence of this, large-series construction within the framework of a

single design, which will make it less expensive to design, place into operation, maintain and repair ships and train crews;

- inclusion, in the design, of broader capabilities for upgrading during the service life of a ship, since the rate of development of modern weapons and the means of protection against them is greater than the rate of physical aging of the "hulls";
- maximum possible development and use of "dual use" technology in Russian ship building, which will make it possible to obtain the greatest economic impact from monetary resources spent on defense in the shortest time possible.

Submarines—both nuclear-powered and diesel-electric—will probably enjoy unchallenged priority in the future ship building program. The priority enjoyed by submarine construction is determined by three basic factors: the most advantageous cost-effectiveness ratio (which is especially important in the period of budget limitations); the advanced level attained in this sector of ship building, which allows us to say that the level of technological culture is comparable to that of the leading Western naval powers; the abundance of dual-purpose technology (the parallel with space is evident).

Discussing submarines, it would be pertinent to recall that Russia is one of few countries with a submarine fleet that is balanced with respect to the range of its missions, armament and technical execution. It is very important that in addition to improving nuclear-powered submarines, Russian naval seamen and ship builders have not forgotten about diesel-electric submarines. They will continue to play their role for a long time to come in antisubmarine warfare in specific theaters such as the Baltic and Black seas and in a number of coastal seas of the Pacific and Arctic oceans, especially with regard for the latest technical accomplishments that make them comparable to nuclear-powered submarines in relation to a number of indicators.

As far as construction of surface ships of the principal classes is concerned, a certain shift in accents is unavoidable here. Despite differences in attitudes toward aircraft-carrying ships of the new generation such as the "Admiral Flota Sovetskogo Soyuza Kuznetsov," their construction should become one of the priority directions of renewing the fleet's force composition, albeit on limited scale (a minimum of two for each "open sea" fleet—that is, the Northern Fleet and Pacific Fleet). A number of reasons dictating this need are indicated below.

First, considering that the fleet now faces the task of maintaining its forces at a level guaranteeing completion of assigned missions at a minimum force composition, such ships would be the best able to ensure the ability of our submarines, certain branches of naval aviation (reconnaissance, missile, ASW) and of formations of surface ships to stand up in combat out of range of shore-based aviation. That is, sizable allocations for the construction of TAKR [heavy aircraft-carrying cruisers]

are economically justified from the standpoint of the cost-effectiveness ratio, since this will make it possible to reduce other expenses that are unavoidable in the absence of such ships in the fleet's composition. These expenses may turn out to be significantly higher than the former, if the discussion turns to building additional numbers of ships, to growth of the shore-based aviation fleet, and finally, to the quantity of fuel used by ships and airplanes in sailing (flying) to the destination and in actions there, not to mention the losses, which in the case of combat activities would be greater for groupings that do not enjoy cover from carrier-based aviation in remote regions. Second, the new naval strategy adopted by developed naval powers presupposes transfer of a certain proportion of the fleet's efforts from ocean expanses to coastal waters, which will doubtlessly raise the role of air defense lines, which are being moved forward and which have as their most important elements the air patrols carried by TAKR that are moved up to the line of maximum range of shore-based aviation.

Construction of missile-artillery and ASW ships will doubtlessly undergo significant changes. Merging these two classes of ships into a single universal class of warship such as the cruiser or destroyer, equipped with identically powerful air defense, missile, artillery and ASW armament, may become the most promising direction. This trend can already be discerned in world ship building. For example the USA and Japan have already begun building such ships (guided missile destroyers of the "Arleigh Burke" and "Yukikadze" classes respectively). In the meantime we are still using destroyers like the "Sovremenny" (primarily a missile-artillery ship) jointly with large patrol ships—essentially the same destroyers of the "Udaloy" class (with high-power ASW armament)—to carry out many combat missions.

Designing warships for "closed" seas (Baltic, Black and perhaps even the Caspian) as well as for the coastal regions of "open" seas is a topic of special discussion.

The fleet's light forces, represented today by small ships and combatant craft, will in all probability also develop in the direction of universalization. This trend has already revealed itself clearly in world ship building (for example adoption of multipurpose craft equipped with modular Standard Flex-300 armament by the Danish Navy.) The modular variant appears to be more promising than, let us say, creating specialized ships on the basis of the same design, inasmuch as the former makes it possible to utilize the combat capabilities of a small number of ships more flexibly.

As far as amphibious assault landing forces are concerned, construction of purely military assault landing ships should obviously concede its position to construction of "dual-purpose" ships intended primarily for work in the Far East and North. A good example of such a design concept would be, in our opinion, the "Vitus Bering" general-purpose icebreaker supply ships. In parallel with building such vessels, we need to improve the Russian icebreaker fleet, which, considering the importance of maintaining the sovereignty and economic interests of Russia in the Arctic basin and in the Northwest Pacific, should in our opinion merge

in the future with naval units of the border troops and the naval search-and-rescue service with the goal of establishing a fundamentally new and necessary (especially on the periphery) structure—coastal security performing military, economic and search-and-rescue functions.

As regards the force composition, considering the growing world significance of the Pacific region, in the future it would be suitable to concentrate around two-fifths of the main forces of the Russian fleet in the Far East, and around a third in the North, leaving a sum total of a fourth of the fleet in the Baltic and Black seas and in the Caspian. It stands to reason that such a redistribution of forces must be preceded by meticulous analysis and justification, including creation of the necessary infrastructure (basing, repair, housing for seamen etc.).

Historical parallels are always conditional, but imperfect as they may be, they are often useful. Recall the 1920s. At that time the fleets and flotillas were transformed from full-fledged large strategic formations into so-called DOTs (operational ship detachments). Only the most battleworthy ships, primarily of the latest designs, now remain within the composition of these DOTs. Ships that could not be repaired for various reasons at that time were retired. With the beginning of the fleet's restoration some of them underwent upgrading and were included within the composition of the naval forces of the Workers' and Peasants' Red Army, while some (the most obsolete and those that could not be repaired) were scrapped. It would appear that the current situation requires similar measures. It would not at all be

necessary in this case to scrap all ships withdrawn from the force composition. Some of them could be sold abroad. Indonesia's acquisition of 39 ships of the former GDR, predominantly Soviet-made, is a recent example).

Having touched upon the subject of naval arms trade, it should be noted that considering the reductions in military expenditures, foreign orders may become vitally necessary to maintaining the scientific, technical and production base of military ship building. However, there can be no doubt that any transfer of weapons and technology that is made must not be detrimental to the country, and therefore such deals require special expert examination, including over the long haul.

And so, Russia's evident withdrawal to borders almost recalling those of the times prior to Peter the Great may paradoxically compel the country to turn its face toward the sea, and thus open up new possibilities for itself. As a result it is fully probable that the sea element will grow stronger in its economy and policy. Such a situation will logically require greater attention to the fleet, including to the Navy, and this will raise the latter to a place of primary significance among the present armed services.

Footnote

1. Here and subsequently, calculations are carried out in 1991 prices.

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INTERREGIONAL MILITARY ISSUES

Russia, Kyrgyzstan Sign Agreement on Military Cooperation

93UM0655A Moscow KRASNAYA ZVEZDA in Russian
6 Jul 93 p 1

[Report by KRASNAYA ZVEZDA correspondent Sergey Knyazkov: "Russia and Kyrgyzstan Sign Military Cooperation Agreement"]

[Text] In Moscow on 5 July, Russian Federation Minister of Defense Army General Pavel Grachev and State Committee for Defense Affairs of Kyrgyzstan Chairman Dzhanybek Umetaliyev signed a number of documents relating to military cooperation.

The pact and the agreement are to govern the most important aspects of military cooperation between the two independent states, list details concerning the use of Russian military facilities located on Kyrgyzstan soil, and specify the status of Russian servicemen.

UKRAINE

Ukraine MOD Refutes Commercial Involvements in Air Force

93UM0655B Moscow KRASNAYA ZVEZDA
in Russian 6 Jul 93 p 3

[Article by Major Grigoriy Nesmyanovich: "First We Buy Up Aircraft, Later the Pilots: Some Ukraine Aviation Units Look to Commercial Structures"]

[Text] Kiev—The Press Service of the Ukraine Ministry of Defense has released a statement in which it refutes allegations of involvement of commercial structures in the operations and routine activities of a strategic aviation unit. The press has been making frequent references to this. Indeed, the activity of the Ukraine Ministry of Defense Commercial Center, which has been abolished by order of L. Kravchuk, and that of a large number of commercial firms, has become the subject of detailed "explanations." The fact of its untimely end, after merely one year since its founding, is an indication - to put it mildly - that the KT's [Commercial Center] was not operating in a manner that was above reproach, such as

the instances whereby merchants were offered special considerations in the matter of purchasing aircraft and airbase equipment. Nonetheless, even that period of time was sufficient for certain of the organization's functionaries to purchase apartments for themselves in the capital. However, even more important is something else: The Press Center has taken under its wing the firm Busol, which consists of a system of branch enterprises.

Busol showed up in Ukrainian strategic and transport aviation almost immediately following the cooling of the "oath-taking passions" (the taking of oath of allegiance to Ukraine was singularly scandalous here) and initiated its activity with an outright commercial flourish. Especially noteworthy was how the Busol people took to making frequent trips to Belaya Tserkov and Uzin, which housed one of the formerly best DA [strategic aviation] divisions commanded by General M. Bashkirov. The businessmen's trips soon gave rise to the appearance of a curious document entitled "Strategic Aviation Units Conversion Program," which was signed by General M. Bashkirov, Ministry of Defense Commercial Center Acting General Director G. Kuznetsov, and V. Sorokin, the president of Busol. Certain items contained in the document indicate that what is discussed amounts to nothing less than a state program, one including not only "pure" conversion, but intentional commercialization of combat aviation units as well. For example, one need only consider the provision: "... It is advantageous to lease this category of aircraft (transport aircraft possessing less than their full service life - author), with terms favoring the lessees and with the right of first refusal for purchase by the latter, to commercial structures consisting of discharged servicemen formerly serving on the air base."

It cannot be said that the above document is either good or bad, since a person may write down any thoughts he may have. However, in certain Ukrainian aviation units businessmen have for a long time been looming quite larger than direct superiors in the eyes of pilots, in that they are offering the servicemen a choice: Continue to serve, but without flying (since there is no fuel) and be paid peanuts, or come work for us. This would be Busol, the firm!

ARMS TRADE

Steady Decline in Weapons Exports Reported

93UM0703A Moscow SEGODNYA in Russian No 33,
13 Jul 93 p 3

[Article by Pavel Felgengauer: "Weapons Exports Continue To Decrease. Official Figures for 1992 Announced"]

[Text] Last week Russia sent the United Nations figures on trade in weapons in keeping with the requirements of the UN Register of Conventional Weapons. The official results of "military-technical cooperation" in 1992 are as follows:

Tanks	6	Oman
	1	Great Britain
Armored combat vehicles	80	United Arab Emirates
	84	Finland
	4	Sierra Leone
	30	Uzbekistan
Combat aircraft (Su-27 and Su-27UB)	26	China
Submarines	1	Iran
	1	Finland (leased as a museum exhibit)
Military vessels	3	Poland (leased)
Missiles (air-launched for SU-27)	144	China

Large-caliber artillery systems (with calibers of no less than 100 mm) and combat helicopters were not exported in 1992. There were no weapons imports to Russia in 1992.

Last year the Russian Defense Ministry also turned over a considerable quantity of military equipment and weapons to the armies of the former Soviet republics. But since the division of the property of the former unified state cannot be simply interpreted as exports and imports, the Russian Government decided not to report these figures to the UN Register of Conventional Weapons.

In keeping with Resolution No. 46/36 of the UN General Assembly on the creation of the Register of Conventional Weapons, it was also suggested that stockpiles of conventional weapons and purchases of weapons from domestic production in 1992 be reported (on a voluntary basis). Unlike Russia, the majority of Western countries reported these figures.

Incidentally, in the opinion of competent experts, even the Russian General Staff does not know the true quantity of technical equipment now located on the territory of Russia. In Western Siberia tens of thousands of units of armored equipment are rusting out of doors. Warehouses of plants of the military-industrial complex are overflowing (in 1992 production of the "basic item"

continued at many of them, frequently without a state order). Not all of the equipment produced during 1991-1993 even under the state order was purchased. Hopes of finding solvent arms buyers on the world market have by no means been realized in recent years.

In 1992 (if the official figures are accepted unconditionally) weapons exports continued to decrease at catastrophic rates. Domestic specialists in weapons exports considered 1991 to be extremely unsuccessful as well: there was a four- to fivefold reduction of exports as compared to the average yearly level of the past decade (1981-1990). But in 1992 (compared to 1991) weapons exports dropped again: tanks—79-fold; armored combat vehicles—3.3-fold, combat aircraft—1.5-fold, and large caliber artillery systems—from 381 to zero.

China was the main buyer of Russian weapons in 1992 (26 Su-27's). The overall cost of the transaction, taking into account weapons for the aircraft, training of Chinese pilots, etc., was approximately \$1.4 billion. Unfortunately, the aircraft were not paid for in hard currency but rather (more than 80 percent) with Chinese consumer goods, with which everyone is quite familiar (track shoes, jackets, canned stew meat, etc.).

Incidentally, official figures on weapons exports in 1992, as is frequently the case, do not reflect the real state of affairs precisely. In 1992, in addition to the deliveries reflected in the report to the United Nations, commitments of the Soviet Union for weapons deliveries to Syria (mainly armored equipment) were also fulfilled. But the vehicles were put into export condition at a Kiev plant, some of the technical equipment was delivered from several other Eastern European countries, and their dispatch to the consumer was handled from the Oktyabrskiy specialized military export port (near Nikolayev on the territory of the Ukrainian republic). Correspondingly, the Russian Government decided not to include figures on weapons deliveries to Syria in the official figures submitted to the UN, apparently considering that Kiev should have done that. But the fact that these deliveries were made in 1992 was announced quite officially.

It is impossible to completely rule out the idea that there were also other, unofficial or semi-official deliveries of weapons and equipment. The flow of ammunition and weapons to the "hot" spots of the nearby foreign countries is fairly steady. And deliveries of Soviet weapons to CIS countries are not seriously monitored at all.

In keeping with the conditions of the UN Register of Conventional Weapons, information on weapons exports should have been reported as early as 30 April. Russia was more than two months late in fulfilling the international commitments she had made. Obviously, the process of coordinating what should be reported to the United Nations and what should be kept secret took a considerable amount of time.

DOCTRINAL ISSUES

Psyops: Utility of Psychological Warfare Operations

93UM0667A Moscow MORSKOY SBORNIK
in Russian No 4, Apr 93 (Signed to press 26 Apr 92)
pp 58-63

[Article by Lt Col K. Polyakov: "War for Minds (Psychological Operations and Countermeasures)"]

[Text] Psychological influence upon the enemy was considered to be a powerful weapon back in Antiquity, and in Ancient China it was even recognized to be a component of military art. To achieve success, the warring sides spread rumors that the numerical strength of their troops was greater than the enemy's, about supposed plans for maneuver of forces, about the treachery and flight of the foe's command, about their good treatment of prisoners, about possession of a new kind of weapon and so on. In this way they tried to exert pressure upon the mind, feelings and will of soldiers of the opposing side and upon the civilian population with the purpose of demoralizing them.

In the 20th century such psychological influence came to be called "propaganda," "psychological operations" and even "psychological warfare."

Any psychological influence may be viewed as a certain variant of human communication. Consequently it may have arisen with the advent of interpersonal relationships. As communications developed, the means of such influence upon the way of thinking and behavior of people became more sophisticated, and in view of this, more effective. Now that the world is covered by global radio and television broadcasting systems, and audio, video and duplicating equipment have become widespread, the possibilities of such activity have become close to boundless.

The high importance of goals pursued in war and of the objectives sought in the course of combat operations led to the appearance of special subunits in the armed forces of a number of states for the preparation and conduct of psychological operations (psyops), which are reinforced under combat conditions by the actions of sabotage and reconnaissance subunits, military reconnaissance, the public communication service and others. Organization of such operations is regulated by special directives and manuals, written both for the armed forces of individual countries and for their blocs, alliances and pacts. For example the one directive "On Principles of Planning and Conducting Psychological Operations" is in force NATO-wide. The following fundamental premises make up the conceptual basis of these principles:

Psychological operations play the decisive role in winning the support of the people for political and military measures, and in creating the resolve to reach the goals of the country's national policy;

a possibility exists for avoiding the use of military force if such operations are started ahead of time, are meticulously organized, and are conducted with high effectiveness;

psychological operations provide support to combat activities at all levels by reducing the fighting capabilities of enemy troops (forces);

The conduct of operations of this sort is not limited by international legal acts, and therefore the most diverse forms and methods can be used to raise their effectiveness.

The objects of psychological operations may be: the population, the army and the government of hostile, neutral and even friendly countries, and in some situations, the population and army of one's own country.

Psychological operations consist of propaganda and psychological actions. In this case propaganda is the systematic, purposeful dissemination of certain ideas with the help of various communication and information resources with the purpose of influencing the opinion, state, feelings and behavior of the objects of influence in such a way as to attain direct or indirect advantages. If the objective source of information is indicated, we refer to "white" propaganda, if the source is left unrevealed, it is called "gray" propaganda, and if the source is false, it is "black" propaganda.

The system of psychological operations pursuing general strategic goals comprises psychological warfare, the bounds of which are significantly wider than the period of combat activities per se. Use of psyops resources on a wide scale during the Korean War, in Vietnam and in the recent war in the Persian Gulf raised this form of support to combat activities to a level of the priority directions of influence upon the enemy during preparations for and conduct of combat activities.

Psychological operations are subdivided in terms of their level into strategic, operational and tactical. Psychological operations at the strategic level are planned and conducted in order to reach long-term goals. The population, armed forces and government of the corresponding countries are the object of influence. Such operations require the coordinated actions of the military department and various state structures.

Psychological operations at the operational level provide support to the deployment of the armed forces, and to the beginning and successful conduct of combat activities by their groupings. The main things that make propaganda and psychological activities within the framework of operations at this level unique are that they help to defeat enemy forces directly or indirectly, making them disbelieve the possibility of victory, they prepare the country's population for combat activity on its own territory, and reduce its participation in the conflict.

At the tactical level psychological operations are planned and carried out in the interests of attaining immediate and short-term goals, and to provide direct support to

combat units and subunits. They are conducted with the object of influencing civilian and military personnel of the enemy within the tactical commander's zone of responsibility.

Psychological operations of all levels are meticulously coordinated in place, time and objectives, and they are reconciled with the battle plans of the command of supporting troops and forces, thus ensuring mutual support and flexible reaction to a changing situation. They are conducted by special forces—psyops units. Subunits making up specialized formations intended for specific missions.

Psyops organs are staffed by qualified psychologists, technical specialists, artists, journalists, translators and so on. They all undergo special training and advanced training in training centers, where courses on the principles of psyops are organized for commanders and staff officers.

As a rule, preparation of a psychological operation proceeds through a number of successive stages:

analysis of the missions of the supported large strategic formations, combined units and units, and determination of the goals of the psychological operation;

collection of information and analysis of the object of influence;

selection of the topics, symbols and means of dissemination of the propaganda;

preparation of the corresponding materials and preliminary verification of the effectiveness of the planned measures;

dissemination of propaganda materials and evaluation of the effectiveness of the course of the operation.

Factors facilitating the conduct of psychological operations are accounted for in their planning and conduct:

fear, apprehensions, uncertainty and tension in the enemy's ranks regarding the current situation;

shortcomings in the enemy's information acquisition, rumors currently in circulation, and presence of unverified information;

the opponent's habits, accepted norms and views, and the group ties he maintains;

losses of personnel and equipment, shortcomings in logistical support and supply of the enemy's troops, growth of morbidity, and difficulties with medical support;

presence of inexperienced, weak command personnel, deficiencies in personnel training, fatigue, and dissatisfaction with the development of events;

economic, social and political tension in the opposing country (starvation, dissatisfaction with the government, forcible mobilization of ethnic minorities, evasion of service, desertion and so on).

Factors making it difficult to conduct such operations are not ignored either:

the highly dynamic nature of combat activities;

insufficiency of reconnaissance data;

disadvantageous development of the situation for one's own troops;

crucial problems in providing personnel, materials and equipment to psychological operation subunits;

the requirements of secrecy, etc.

Mutual psychological influence that affects fulfillment of missions both in peace and in wartime is known to exist between the enemy's armed forces, population and troops. This is also accounted for when planning operations. This is why an effort is made to organize and amplify its positive effect, and exclude or limit the negative. All of this objectively determines the goals of psychological operations, and their orientation upon:

convincing public opinion of the justification and need for military intervention (explaining policy, portraying the enemy in an unfavorable light, attaining a benevolent attitude toward one's own country etc.);

influencing the military-political leadership of the enemy and his allies with the purpose of causing them to refuse to enter the war (economic and political sanctions, demonstration of military might and of the decisiveness and readiness to swiftly carry out one's plans and reach the military goals);

supporting the opposition within the enemy's country, promoting the deepening of racial, ethnic, religious and other conflicts, leading and assisting dissident elements, undermining trust in the country's leadership (in the effectiveness of the measures it implements, in the justice of the war's goals; publicizing certain information which the government is covering up for some reason, and so on);

influencing the population of other countries with the goal of promoting development of a benevolent attitude toward oneself on the part of the population of friendly and neutral countries, and the opposite attitude toward the foe;

reducing the fighting capability of the enemy by undermining his morale and creating an atmosphere of uncertainty and anxiety (to reduce aggressiveness and the will to win, to encourage a propensity for desertion, for evasion of the orders of the command and for betrayal, to intensify doubts in the reliability of the weapons and fighting capability of his troops, to distort the picture of combat activities and the combat situation, to mislead the personnel, to break down discipline and unit cohesion, to disorganize command, control and communications, etc.);

carrying out analytical work to reveal the enemy's vulnerable points, preparing the corresponding information and bringing it to the awareness of the command as well

as to groups and persons carrying out psychological missions in the area of combat activities;

providing assistance in capturing enemy population centers by presenting ultimatums and transmitting appeals for surrender;

helping the command maintain surveillance over people in the zone of combat activities predisposed to hostility;

counteracting the enemy's psychological operations;

predicting the degree of psychological influence upon the foe, and evaluating the effectiveness of his influence upon one's own troops.

Depending on the vulnerability (weak points) and susceptibility of the objects of influence and the objectives sought in a psychological operation, the corresponding theme is selected, which includes the subject (topic) and orientation of measures carried out to attain the goals of psychological influence. It is the binding link between the vulnerable sides revealed by reconnaissance and the nature of the behavior of the objects of interaction upon which the corresponding influence must be exerted. In this case the theme of the psychological operations is realized as a rule in two directions—causing division among certain groups of people, and suggesting the inevitability and naturalness of the course of the predicted development of events.

To cause division, differences between groups of people comprising the object of influence are emphasized. For example during the Falkland conflict the propaganda measures of the English, which were oriented upon the rank and file of the Argentine army, were focused upon the special position of privilege enjoyed by their officers; an attempt was made to use this in order to evoke a group feeling of injury and dissatisfaction.

Inevitability and naturalness (of defeat, of a collision) presupposes utilizing successfully completed programs or combat activities of one's troops for propaganda purposes, while laying special emphasis upon the failures and defeats of the enemy. The goal pursued in this case is to persuade the foe of the uselessness of resistance, and that cooperation would be much more advantageous, to predispose him to recognize that the actions of the opposing side are just, and that in reality they correspond to the wishes of the objects of influence themselves.

Leaflets bearing material encouraging surrender were widely used during psychological operations conducted by the multinational forces against Iraqi troops, especially in the concluding phase of the war. These leaflets were not threatening in nature, and they promised a friendly attitude toward those who surrender. Their purpose was to persuade the enemy's servicemen that such a step would be fully natural in the situation as it stood, and that it would not be dishonorable. For example one of the leaflets pictured an American soldier extending an open hand to an Iraqi as if suggesting to him an honorable way to preserve his life: "I recognize you to be an equal," the image proclaims, "You are now

in a difficult position, you have lost, but unfortunate things happen to everyone at one time or another." The need for making a choice of "either surrender or death" is not emphasized in this case, thus avoiding a challenge that would offend a man's honor, to which the response would often be: "Death is better than an open manifestation of fear and subservience."

Constant aggressiveness, possession of the "psychological initiative," is considered to be an important condition for successful psychological operations. Appeals to particular action should be made only when this is required by the situation and the object of influence is able to perceive and carry them out.

Armies of different countries have almost identical technical resources for psychological operations:

duplicating polygraphic equipment;

a loudspeaker system;

artillery means of spreading leaflets;

airplanes equipped with loudspeakers and leaflet dropping devices;

radio, television and motion picture programs created by the corresponding services;

radio broadcasting and television systems installed aboard ships and in tanks, motor vehicles and helicopters and so on.

At the same time, the methods of psychological influence also include rendering assistance to loyal local authorities and population, and inciting rebellious actions, strikes, sabotage, civil disobedience, mass rallies, demonstrations, marches and so on. For example the psyops subunits of the multinational forces distributed over 15 million leaflets during operations Desert Shield and Desert Storm, six high-power radio stations transmitted programs around the clock in the frontal zone, and public address stations were intensively employed. In addition to artillery of the U.S. Marine Corps, American and English aviation was widely employed as a means of disseminating printed matter. Difficulties in the interrelationships of the government with Kurds and other ethnic and religious groups were not ignored either.

Thus psychological operations are a complex of measures carried out with the purpose of psychological influence upon the mind, feelings, will, convictions and behavior of the opposing side.

Specific propaganda materials making use of various techniques of psychological influence are developed in order to attain the specific goals of psychological operations. The choice of the particular technique depends on many factors, ones such as the overall and particular goals, presence of intelligence to support psychological operations, availability of time, the characteristics of the object of influence and so on.

Each technique imparts a particular orientation to the information while preserving its outwardly neutral appearance and concealing the true intentions and goals.

It is believed that psychological influence upon an object must take the form of two successive phases. The first is defined as the preparatory phase, which facilitates perception and creates an atmosphere of trust in the source of the information; second, interest in the source's messages is aroused, and the corresponding attention is maintained. Such division into these phases is relative and conditional, since the objectives of both phases are pursued practically concurrently, although in certain periods materials more typical of one of them may be observed to dominate somewhat.

The main goal of winning trust in the source of information is to make the object of influence subsequently want to listen to this source. A number of techniques are used for this purpose.

1. Creation of an image of "special awareness" of events that may be covered over for a number of reasons by official information sources. This is achieved by transmitting truthful information, the accuracy of which is known or which may be easily verified. In particular, facts such as the number of killed and wounded, the names of people, the names of streets, house numbers, and large quantities of specific details within which the message is "couched" are classified as such "persuasive information."

Such information is used to surmount the psychological barrier of mistrust, which is one of the natural means of the individual's psychological protection. There is one rule operating here that requires strict observance. According to it, when there is no need to hide or modify facts, they are presented with maximum truthfulness, since any falsehood that is revealed significantly weakens the source's authority.

2. Creation of an image of "objectivity, independence and alternative." This is achieved by citing documents, expert assessments, the opinions of participants and eye-witnesses, and so on. Perception of such material is cumulative, the material becomes persuasive, and it produces no less a result than a meticulously substantiated argument in regard to some issue.

3. Timeliness. A source of information that is the first to communicate certain events will subsequently be preferred by the audience over other sources. Thus the simple technical issue of the rate of transmission of messages becomes highly important, as a result of which the enemy will strive not simply to be timely but to be super-timely, and he will try to forestall official information sources at all costs. Sensationalism is a technique that is often used here. It makes it possible to create the feeling that what is communicated is unusually important. Sensationalism is also used to attract the attention of the audience and to widen it. Transmission of information ahead of official (competing) sources creates the impression that this is an informed source, even though the information may be fabricated (made up) to a significant degree on the basis of, mildly speaking, not entirely truthful materials and of doubtful sources.

Another psychological effect of super-timeliness is the "effect of presence," which creates the illusion that one's sources of information are everywhere. This is achieved through fast transmission of information even on insignificant events occurring in different places, including through the use of information from reconnaissance subunits.

A person who has heard, read or seen any information before another subconsciously feels himself to be more informed, although he does not extract any practical benefit from the obtained information. It is well known that the first report of a given fact or event has a greater effect upon the object of influence than subsequent reports. Consequently he who reports news first creates a social set for its perception and interpretation that is more advantageous to himself, while all others would require significantly more effort and time to change this set.

4. Emphasis of one's analytical and predictive powers. Representation of actual events as having been predicted by the source of information, which is made possible when this information source is able to make different interpretations of particular phenomena developing in a direction satisfying one of the predictions.

Interest in transmitted information depends in many ways on the need for it, as well as on intonations and the unique features of its transmission. The appropriate outer wrapping, music, enervating or arousing techniques, and so on are used for this purpose. The corresponding information is transmitted on this background in strictly dosed amounts. The roots of this technique extend deep down into unrecorded history, and they are associated with religious rites and various ritual procedures. Young people as well as certain groups of people who are educated but who do not think sufficiently critically and independently are more susceptible to this technique.

A number of techniques of suggestion and persuasion are used to attain particular goals of psychological influence. In this case the effect of suggestion is determined primarily not by the content of the information but by its external form, its expressiveness, its emotional hue, and by the authority of the source. Because suggestion is based on uncritical perception, its success depends on sluggish comprehension and absence of logical analysis. Let us recall the basic techniques of suggestion.

Statements offered as indisputable facts. The impression is created that these statements are obvious, and that they do not require additional proof. Therefore they can essentially be both truthful and false.

Juxtaposition of facts. This technique is used to induce a sense of the importance and scale of events and phenomena. Arguments are selected in this case in such a way that the conclusion would be obvious.

Selection of arguments to amplify or weaken statements. Conclusions are not included in the text of messages; they must be reached by those for whom the information

is intended, and therefore various opinions are illuminated and supposedly objective arguments are offered casually, in a way that is perceived at first glance as "unbiased."

Fractionated and rapid transmission of a large number of messages. Numerous unrelated messages are transmitted like automatic fire. It is wrong to think that this is transmission of information in its purist form, and that this technique does not pursue fully definite goals. Diversity of the communicated material makes it difficult to evaluate its significance, while fractionation of information on particular events makes it easier to play with the facts. It is known that even authentic information and isolated quotations presented out of context may be pieced together in such a way and presented on such a background that ideas totally different from the true ideas and from those which their authors had wished to express will be expressed.

The most diverse facts, including real ones, are used to make up a block of such messages, but the authors piece them together in a fully predetermined manner, even though sometimes they might have no external relationship to the principal material of the message. This technique generates the feeling that the situation is shifting and unsteady, and it evokes feelings of falseness of ideals, despair, defenselessness and uncertainty.

Dosing of negative and positive elements. For praise to appear more plausible, a little bit of criticism must be added to it. And for a negative judgement to be perceived as real, some positive characteristics are added to it.

Repetition of slogans, appeals, stereotypic phrases. Every slogan or phrase must be in keeping with the intellectual level and other mental features of the groups of people that are the targets of influence. It is presumed that the listener (reader) will not ponder the meaning of individual words and the correctness of the wording in general. The psychological mechanism of multiple repetition is based on forcible mobilization of attention, on subconscious (unconscious) perception of introduced information, and on the fact that the individual often simply fails to think about the significance of certain (familiar) words, about their meaning. The more often certain variants of ideas, opinions and viewpoints and their accompanying verbal envelope are repeated, the more dependably and certainly they are perceived to be the recipient's own. However, when repetition is too linear, it may be perceived as obtrusive and biased, it does not lead to the desired goal, and the moment a particular situation or particular conditions encourage people to begin to think and to penetrate into the essence of what is being communicated, repetition of slogans, appeals and "trite" phrases becomes ineffective.

Creation of dissatisfaction. This entails suggesting to the object the sort of convictions, thoughts and feelings that make him feel that he is injured, that he has been deprived of privileges he has earned, and so on. One of

the techniques of amplifying dissatisfaction is to assume the role of an active defender of the interests of the object of influence.

The attention devoted to suggestion is so persistent because it is almost certain to create convictions. In this case an object of influence is made to believe in propaganda actions not by proving the truthfulness of the suggested point of view of some assertion, but by winning his agreement with these actions. But because convictions are based on more conscious or critical perception of some information, the techniques of persuasive influence are based on meticulous selection and logical ordering of facts, arguments and conclusions.

Thus, the belief of the inevitability of defeat amplifies the natural desire to be on the winner's side. Examples of persuasion may include:

- selection and biased presentation of only positive or only negative facts, as well as use of disinformation and various fabrications, and development of greater trust in these fabrications through the use of a large number of fine details;

- communication of an event, a situation or an issue which might elicit a particular reaction from the object of influence (the hope here is that the response will discredit the enemy);

- formation of a negative emotional attitude, and its association with base deeds by certain persons at the command level with the goal of discrediting and undermining authority and discrediting their activity and style of leadership; utilizing demeaning epithets and data that are hard or impossible to verify, which creates the conditions for further spread of rumors;

- exploitation of positive perception of words like "freedom," "independence," "victory," "patriotism" and so on to shape views which are advantageous or which correspond with (meet) one's own interests;

- artful replacement of respected values and concepts by those which are advantageous and necessary for the purposes of the particular propaganda action in a manner that is unobtrusive and unnoticeable to most people;

- use of phrases requiring uniformity of behavior and creating the impression that everyone does it (for example: "All normal people understand that...", "No person with common sense would deny that...", and so on);

- derision aimed not at people but at views in behalf of which the struggle was initiated;

- manifestation of indifference to certain information (an event), and thus indirect belittlement of its importance;

- presentation of only part of the truth while simultaneously asserting that this is "the entire truth" pertaining to a given problem or event;

- arousal and maintenance of a negative attitude toward various groups of people (for example, different regions,

nationalities etc.); in this case they are separated into "bad-good," "ours-foreign," "we-they," and so on, and a positive attitude is created toward a fully determined group of people (those who surrender, those who defect to the enemy's side etc.).

Rumors occupy a special place among psyops techniques. They can become an effective means of psychological influence, especially in crises and in their extreme manifestation—armed conflicts. Their goal is to sow mistrust, to raise doubts, to mislead, to confuse etc. The effect from using false information is short-term as a rule. It lasts for the most part during the time that the propaganda influence is exerted, as long as other information is absent and acquisition of fuller and more reliable information has not yet caused the lie to surface. However, causing any vacillation, uncertainty, doubts and so on in the minds of the objects of influence even temporarily can produce an effect sufficient to achieve the goals of the particular psychological operation.

Rumors are viable and readily perceived to a significant degree because they are a readily available means for satisfying the individual's "information hunger,"—that is, his need for information necessary for his social orientation. The individual undergoes emotionally negative experiences if he lacks information about occurring events, and therefore when a person hears rumors, he subjectively feels himself to be more informed, although his behavior objectively becomes dependent upon them.

Depending on the origin or source of rumors, they may be spontaneous or they may be deliberately fabricated and purposefully spread. Two characteristics of rumors are used to classify them: informative and expressive. The first characteristic determines the objective degree of truthfulness. Rumors are subdivided into four basic types with respect to this characteristic: absolutely doubtful, doubtful with elements of plausibility, plausible, and trustworthy with elements of implausibility.

The second characteristic reflects the overall type of emotional reaction the rumor is intended to produce when it is perceived. In this case rumors are subdivided into the following types:

rumor-wishes, where the disseminated information has the goal of creating disappointment over unfulfilled expectations, such that it evokes the corresponding demoralization of people;

rumor-scarecrows, dissemination of which is most effective and creates a favorable psychological basis in an environment dominated by feelings of anxiety, uncertainty and fear, which usually have a demoralizing effect, and disorganize human activity;

divisive aggressive rumors causing mutual relationships between people to break down and disrupting accustomed social ties and organizational and structural formations through suspiciousness, mutual mistrust, enmity and hatred of certain persons or groups of people.

Rumors are also subdivided as follows in terms of the degree of influence upon the human mind:

those which excite public opinion in general or the opinions of particular groups of people, but which do not elicit clearly expressed forms of asocial behavior;

those evoking antisocial behavior in some part of particular social groups;

those which break social ties and organizational and administrative relations between people and cause development of mass disorder, panic and so on.

The history of propaganda actions carried out in the course of interstate conflicts and armed collisions provides numerous examples of the deliberate use of rumors in the conduct of psychological operations between the warring sides. The dynamics of the development of political and military conflicts show that rather than diminishing, the arsenal of propaganda actions used in psychological operations today is continually growing and improving.

It follows from the above that maintaining stable morale and mental attitudes among the personnel is a mandatory prerequisite of successful fulfillment of combat missions by the unit, large unit, large strategic formation or force grouping. Countermeasures against the enemy's psychological measures having the goal of preventing disinformation and a lowering of the morale of the troops (forces) must be an important direction of this work.

The success of countermeasures to the enemy's psychological operations is attained through:

maintenance of active and clearly defined positions (defense of the interests of one's own country and people); prompt response to problems arising in the course of combat activities and operations, timely support to them, and transmission of anticipatory information;

systematic collection and analysis of information on the morale and mental attitudes of the personnel, and dynamic, quick reaction to change in the situation, in conditions and in the nature of the course of events;

comprehensiveness and simplicity of the arguments, proofs and evaluations employed;

emotional saturation of implemented measures, combination of the rational and the emotional.

In this case the effectiveness of countermeasures will be higher if they are implemented with regard for certain psychological recommendations:

explaining to the troops the goals, techniques and instruments of the enemy's propaganda, and the psychological actions he employs with the purpose of creating sets permitting their critical perception;

acquainting servicemen with facts demonstrating how false and distorted are the techniques and methods used by the enemy for suppression of the individual and group consciousness of opposing troops (forces);

conducting our own psychological operations directed at the enemy's troops, the local population, interned civilians and prisoners of war;

scouting out and destroying the enemy's psychological operation subunits and the equipment used in these operations;

predicting the directions and themes of the foe's psychological actions with the goal of forestalling them and thus neutralizing or reducing their effectiveness;

monitoring the collective and public opinions of servicemen of one's own units and large units with the goal of revealing the degree of the enemy's psychological influence on them, evaluating the vulnerability (susceptibility) of one's own troops to the enemy's propaganda and psychological actions, predicting dangerous consequences, and planning the needed amount of countermeasures; everything that can serve as a nutrient medium for specific psychological actions on the part of the enemy must be studied and meticulously revealed, since timely objective information on particular difficulties, explanation of their causes and of steps taken to correct them, and other work done in this connection make it possible to neutralize the enemy's efforts to a certain degree;

creating a negative attitude in relation to everything originating from the foe; however, not all of his actions should mechanically evoke a refuting or exposing reaction, since it does not make any sense to persuade people

of what they are known to be convinced of, and of what is not important and of concern to the given subunits and units.

He who talks about the "stupidity," "bloodthirstiness," "inhumanity" and other negative features of the enemy without specifics and without providing reasonable grounds for doing so is committing a gross error. This is perceived as a sign of irritation, as an unwillingness to look the truth in the eye, as a clear ignorance of the real traits of the concrete enemy. Objective assessment of one's successes and failures and avoidance of exaggeration of the real state of affairs are important prerequisites of attaining the goals of countermeasures against enemy psyops.

The greater the measure of justice, humanitarianism and of military and social competency in the actions of the command, the fewer possibilities the psyops organs of the enemy have for exploiting the real problems of our troops (forces) in his own interests.

Thus psychological operations conducted in both peace and war require organization of constantly operating countermeasures. However, these measures will be successful only when they become one of the functions of command personnel, when they are anticipatory, mobile and flexible, with regard for the psychological mechanisms that make the individual insusceptible to the influence of the enemy's psyops organs.

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